HCD-XG80/XG700

SERVICE MANUAL

Ver 1.0 2001.03

AEP Model
UK Model
HCD-XG700
E Model
HCD-XG80



Photo: HCD-XG80

HCD-XG80/XG700 is the amplifier, CD player, tape deck and tuner section in LBT-XG80/XG700.

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CD Section	Model Name Using Similar Mechanism	HCD-LX6/LX50/LX70
	CD Mechanism Type	CDM37M-5BD32L
	Base Unit Name	BU-5BD32L
	Optical Pick-up Name	KSS-213DH
TAPE Section	Model Name Using Similar Mechanism	NEW
	Tape Transport Mechanism Type	TCM-230PWR42

SPECIFICATIONS

Amplifier section

AEP, UK models:

DIN power output (rated) 200 + 200 watts
(6 ohms at 1 kHz, DIN)
Continuous RMS power output (reference)
250 + 250 watts
(6 ohms at 1 kHz, 10% THD)
Music power output (reference)
430 + 430 watts
(6 ohms at 1 kHz, 10% THD)

Other models:

The following measured at AC 120/220/240V, 50 Hz
DIN power output (rated) 240 + 240 watts
(4 ohms at 1 kHz, DIN)
Continuous RMS power output (reference)
320 + 320 watts
(4 ohms at 1 kHz, 10% THD)

Inputs
DJ MIX*:
(phono jacks) sensitivity 250 mV, impedance 47 kilohms

GUITAR IN:
(phone jack) sensitivity 75 mV, impedance 470 kilohms

PHONO IN:
(phono jacks) sensitivity 3 mV, impedance 47 kilohms

MIX MIC:
(phone jack) sensitivity 1 mV, impedance 10 kilohms

VIDEO IN:
(phono jacks) sensitivity 250 mV, impedance 47 kilohms

GAME IN:
(phono jacks) sensitivity 250 mV, impedance 47 kilohms

MD IN:
(phono jack) sensitivity 450 mV, impedance 47 kilohms

Outputs
DJ MIX*:
(phono jacks) sensitivity 250 mV, impedance 1 kilohms

PHONES:
(stereo phone jack) accepts headphones of 8 ohms or more

VIDEO OUT:
(phono jack) voltage 250 mV impedance 1 kilohm

MD OUT:
(phono jacks) voltage 250 mV impedance 1 kilohm

FRONT SPEAKER:
HCD-XG80: accepts impedance of 4 to 16 ohms

HCD-XG700: accepts impedance of 6 to 16 ohms

* AEP, UK and Mexican models only

CD player section

System: Compact disc and digital audio system
Laser: Semiconductor laser (λ=780nm), Emission duration: continuous
Wavelength: 780 – 790 nm
Frequency response: 2 Hz – 20 kHz (±0.5 dB)
Signal-to-noise ratio: More than 90 dB
Dynamic range: More than 90 dB
CD OPTICAL DIGITAL OUT
(Square optical connector jack, rear panel)
Wavelength: 660 nm
Output level: –18 dBm

Tape player section

Recording system: 4-track 2-channel stereo
Frequency response (DOLBY NR OFF): 40 – 13,000 Hz (±3 dB), using Sony TYPE I cassette
40 – 14,000 Hz (±3 dB), using Sony TYPE II cassette

– Continued on next page –

COMPACT DISC DECK RECEIVER

9-929-596-11
2001C0500-1

Sony Corporation
Audio Entertainment Group
General Engineering Dept.

SONY®

Tuner section

FM stereo, FM/AM superheterodyne tuner

FM tuner section

Tuning range	87.5 – 108.0 MHz (50 kHz step)
Antenna	FM lead antenna
Antenna terminals	75 ohm unbalanced
Intermediate frequency	10.7 MHz

AM tuner section

Tuning range	
Pan- American models:	530 – 1,710 kHz (with the interval set at 10 kHz) 531 – 1,710 kHz (with the interval set at 9 kHz)
European and Middle Eastern models:	531 – 1,602 kHz (with the interval set at 9 kHz)
Other models:	531 – 1,602 kHz (with the interval set at 9 kHz) 530 – 1,710 kHz (with the interval set at 10 kHz)
Antenna	AM loop antenna
Antenna terminals	External antenna terminal
Intermediate frequency	450 kHz

General

Power requirements	
AEP, UK models:	230 V AC, 50/60 Hz
Mexican model:	120 V AC, 50/60 Hz
Other models:	120 V, 220 V or 230 – 240 V AC, 50/60 Hz Adjustable with voltage selector
Power consumption	
AEP, UK models:	220 watts 0.6 watts (at the power saving mode)
Other models:	300 watts
Dimensions (w/h/d)	Approx. 355 x 425 x 450 mm
Mass :	
HCD-XG700	Approx. 15.5 kg
HCD-XG80	Approx. 16.0 kg

Design and specifications are subject to change without notice.

Notes on chip component replacement

- Never reuse a disconnected chip component.
- Notice that the minus side of a tantalum capacitor may be damaged by heat.

Flexible Circuit Board Repairing

- Keep the temperature of the soldering iron around 270 ˚C during repairing.
- Do not touch the soldering iron on the same conductor of the circuit board (within 3 times).
- Be careful not to apply force on the conductor when soldering or unsoldering.

CAUTION
Use of controls or adjustments or performance of procedures other than those specified herein may result in hazardous radiation exposure.



This appliance is classified as a CLASS 1 LASER product. The CLASS 1 LASER PRODUCT MARKING is located on the rear exterior.

The following caution label is located inside the unit.



SAFETY-RELATED COMPONENT WARNING!!

COMPONENTS IDENTIFIED BY MARK ⚠ OR DOTTED LINE WITH MARK ⚠ ON THE SCHEMATIC DIAGRAMS AND IN THE PARTS LIST ARE CRITICAL TO SAFE OPERATION. REPLACE THESE COMPONENTS WITH SONY PARTS WHOSE PART NUMBERS APPEAR AS SHOWN IN THIS MANUAL OR IN SUPPLEMENTS PUBLISHED BY SONY.

TABLE OF CONTENTS

SECTION 1
SERVICING NOTES

NOTES ON HANDLING THE OPTICAL PICK-UP BLOCK OR BASE UNIT

The laser diode in the optical pick-up block may suffer electrostatic break-down because of the potential difference generated by the charged electrostatic load, etc. on clothing and the human body.
During repair, pay attention to electrostatic break-down and also use the procedure in the printed matter which is included in the repair parts.
The flexible board is easily damaged and should be handled with care.

NOTES ON LASER DIODE EMISSION CHECK

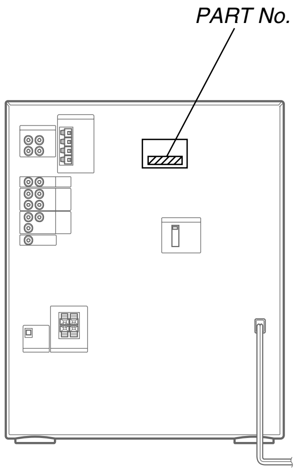
The laser beam on this model is concentrated so as to be focused on the disc reflective surface by the objective lens in the optical pick-up block. Therefore, when checking the laser diode emission, observe from more than 30 cm away from the objective lens.

LASER DIODE AND FOCUS SEARCH OPERATION CHECK

Carry out the “S curve check” in “CD section adjustment” and check that the S curve waveforms is output three times.

- **MODEL IDENTIFICATION**

– Rear Panel –



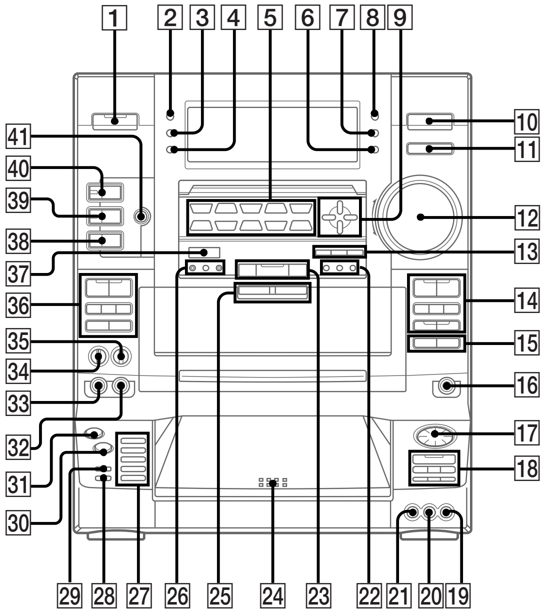
MODEL	PART No.
AEP and UK models	4-232-088-0□
120 V AC area in E model	4-232-088-1□
Singapore model	4-232-088-2□
Mexican model	4-232-088-3□
Saudi Arabia model	4-232-088-4□
Argentina model	4-232-088-5□

SECTION 2
GENERAL

This section is extracted from instruction manual.

LOCATION OF CONTROLS

– Front Panel –



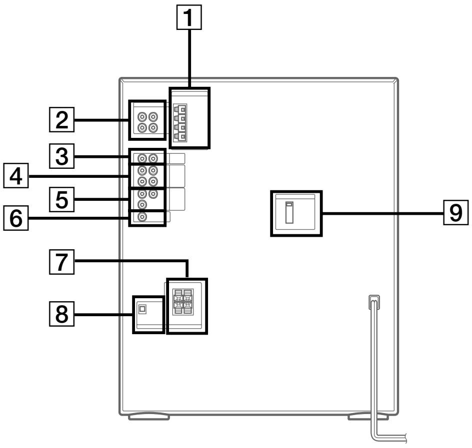
A EJECT ⏏/⏏ B EJECT 25 (15)
AUDIO L 20 (23)
AUDIO R 19 (23)
CD SYNC 15 (16,17)
DIRECT EQUALIZER 5 (18)
- SALSA
- REGGAE
- SAMBA
- TANGO
- MOVIE
- GUITAR
- ROCK
- JAZZ
- DANCE
- GAME

DIRECTION 36 (15,16,17)
DISC SKIP 18 (9,10,17)
DISC 1~5 27 (9)
DISPLAY 3 (8,11,13)
DOLBY NR 36 (15,16)
EDIT 29 (17)
ENTER 26 (12,14)
ENTER/NEXT 13 (8,17,19,22,27)
FLASH 30 (11)
FLAT 13 (18)
FUNCTION 10 (7,9,10,16,17,23,24)
GAME 11 (21)
GROOVE 40 (18)
GUITAR DISTORTION 26 (21)
GUITAR jack 32 (21)
GUITAR LEVEL 35 (21)
H SPEED DUB 15 (16)
Jog dial (AMS⏮/⏭) 17 (9,10,11,17)
LOOP 31 (7,11)
MIC LEVEL 34 (20)
MIX GUITAR/KARAOKE 37 (20,21)
MIX MIC jack 33 (20)
NON STOP 28 (10)
P.FILE 13 (18,19)
PHONES jack 16
PLAY MODE 18 (9,10,17)
POWER SAVE/DEMO (STANDBY) 2 (8)
PTY 22 (14) (AEP, UK models)
PUSH OPEN 24 (9)
REPEAT 18 (9)
SLEEP 7 (21)
SPECTRUM ANALYZER 4 (20)
STEREO/MONO 22 (13)
SUPER WOOFER 39 (18)
SUPER WOOFER MODE 38 (18)
SURROUND 41 (16,18)
TIMER SELECT 8 (17, 22)
TUNER/BAND 23 (12,13,16)
TUNER MEMORY 26 (12)
TUNING MODE 22 (12,13)
VIDEO 21 (23)
VOLUME control 12 (9,13)

BUTTON DESCRIPTIONS

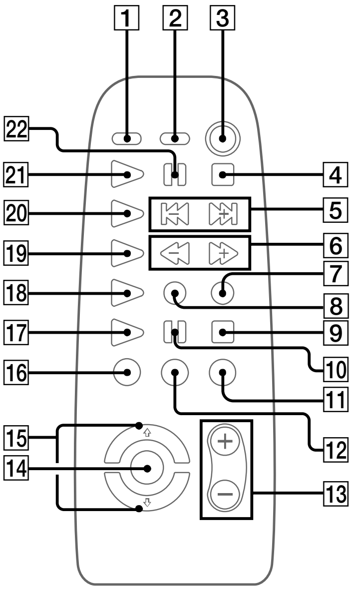
I/⏻ 1
⌚/CLOCK SET 6
▲/▼/◀/▶ 9
● REC 14
❚❚ 14
◀◀/▶▶, AMS⏮/⏭ 14 36
◁,▷ 14 36
■ 14 18 36
◀◀/▶▶ 18
▷❚❚ 18
+/– 23

– Rear Panel –



1 ANTENNA terminal
2 DJ MIX RETURN/SEND jack (AEP, UK, Mexican models)
3 PHONO IN jack
4 MD IN/OUT jack
5 VIDEO/AUDIO IN jack
6 VIDEO OUT jack
7 FRONT SPEAKER terminal
8 CD DIGITAL OUT OPTICAL terminal
9 VOLTAGE SELECTOR switch (120 V AC area in E, Saudi Arabia, Singapore, Argentina models)

Remote control



AMS ⏮/⏭, PRESET+/– 5 (9,13,14,15)
CD ► 21 (9)
CHECK 8 (10)
CLEAR 7 (10)
DECK A ► 19 (15)
DECK B ► 18 (15)
DISC SKIP 1 (9,10,17)
FILE SELECT ON/OFF 14 (18)
FILE SELECT ⇧/⇩ 15 (11)
FLASH 12 (11)
FUNCTION 11 (7,9,10,16,17,23,24)
LOOP 16 (11)
MD ► 17
MD ❚❚ 10
MD ■ 9
SLEEP 2 (21)
TUNER/BAND 20(12,16)
VOL +/– 13 (9,13,15)

BUTTON DESCRIPTIONS

I/⏻ 3
■ 4
◄◄/►► 6
❚❚ 22

Setting the time

1 Turn on the system.

2 Press ⏲/CLOCK SET.
When you set the time for the first time, skip to the step 5.

3 Press ▲/▼ repeatedly to select SET CLOCK.

4 Press ENTER/NEXT.

5 Press ▲/▼ repeatedly to set the hour.

6 Press ENTER/NEXT.
The minute indication flashes.

7 Press ▲/▼ repeatedly to set the minute.

8 Press ENTER/NEXT.
The clock starts working.

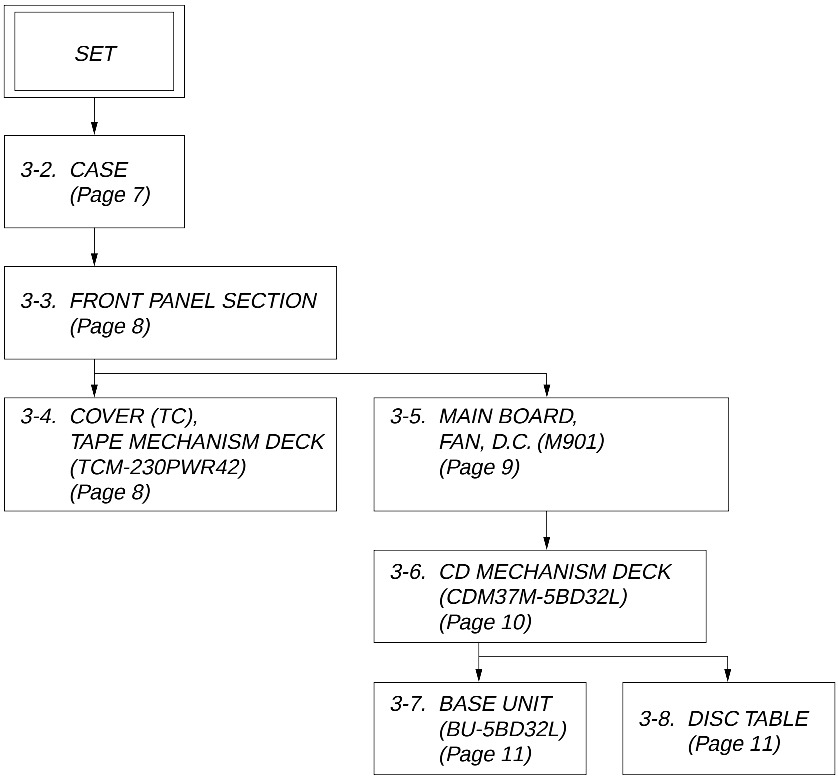
Tip
If you've made a mistake or want to change the time, start over from step 1.

Note
The clock settings are canceled when you disconnect the power cord or if a power failure occurs.

SECTION 3
DISASSEMBLY

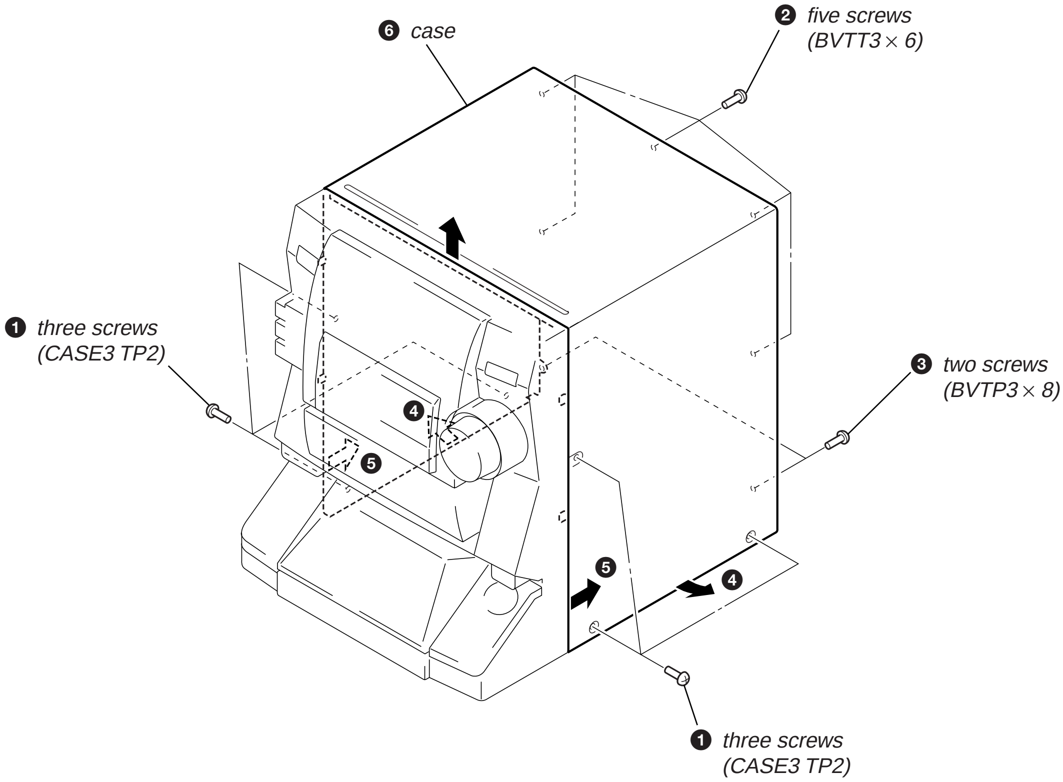
• This set can be disassembled in the order shown below.

3-1. DISASSEMBLY FLOW

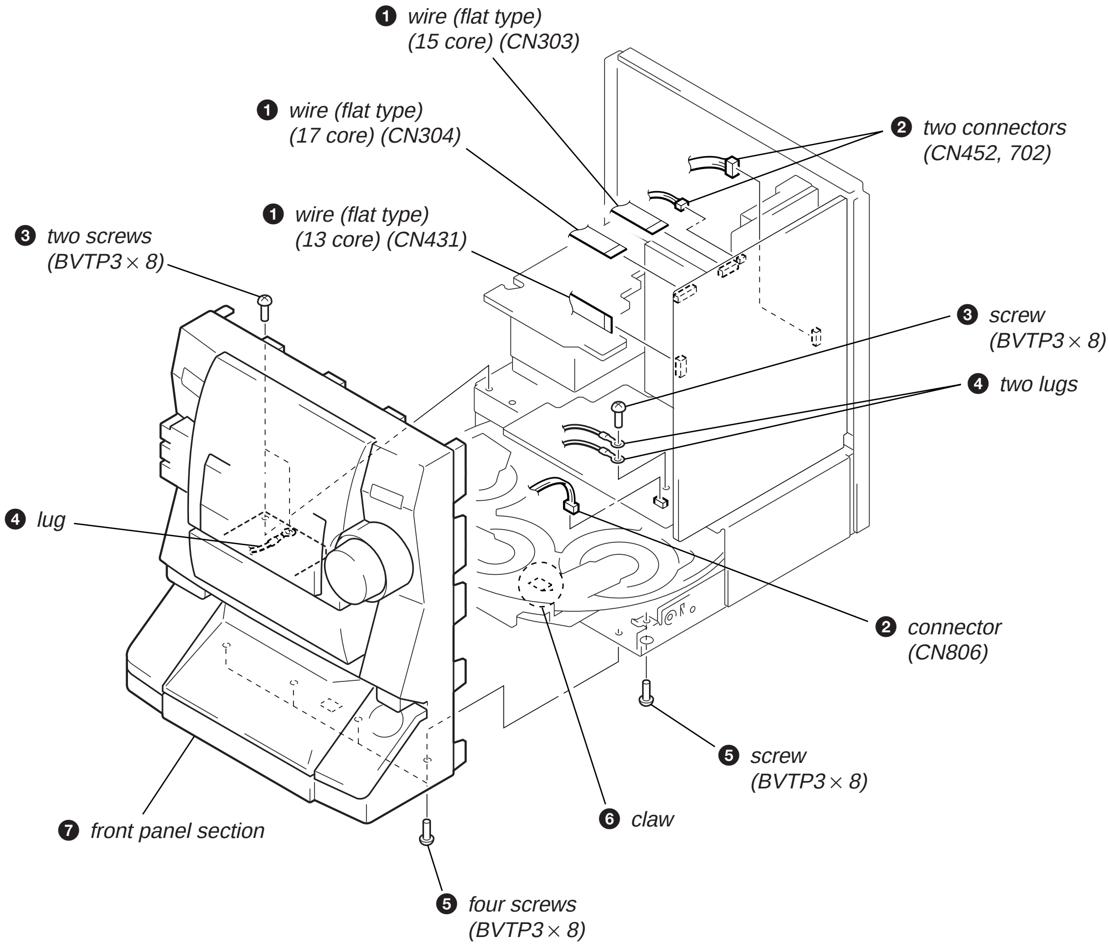


Note: Follow the disassembly procedure in the numerical order given.

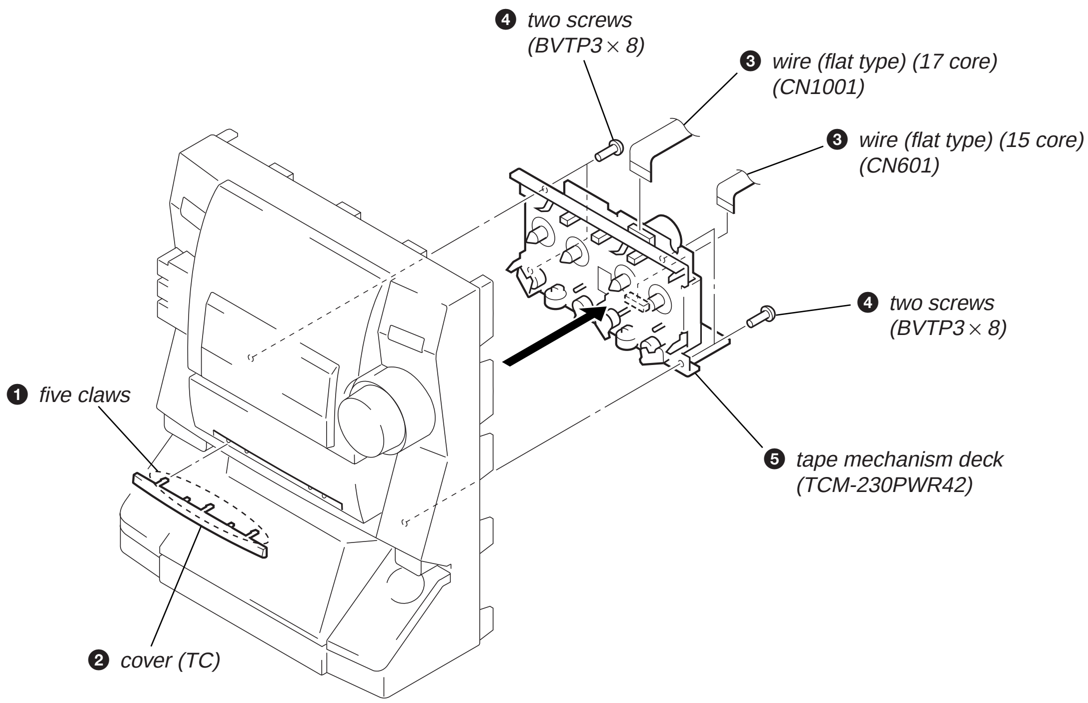
3-2. CASE



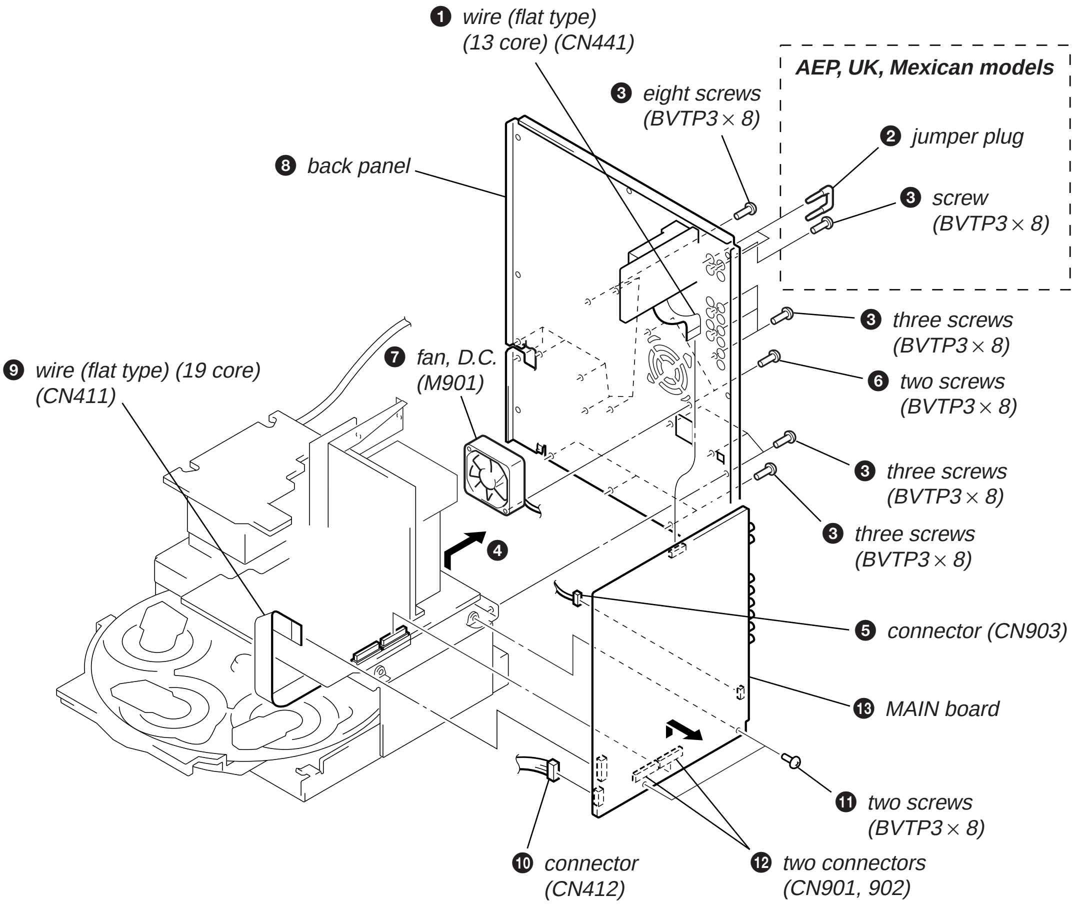
3-3. FRONT PANEL SECTION



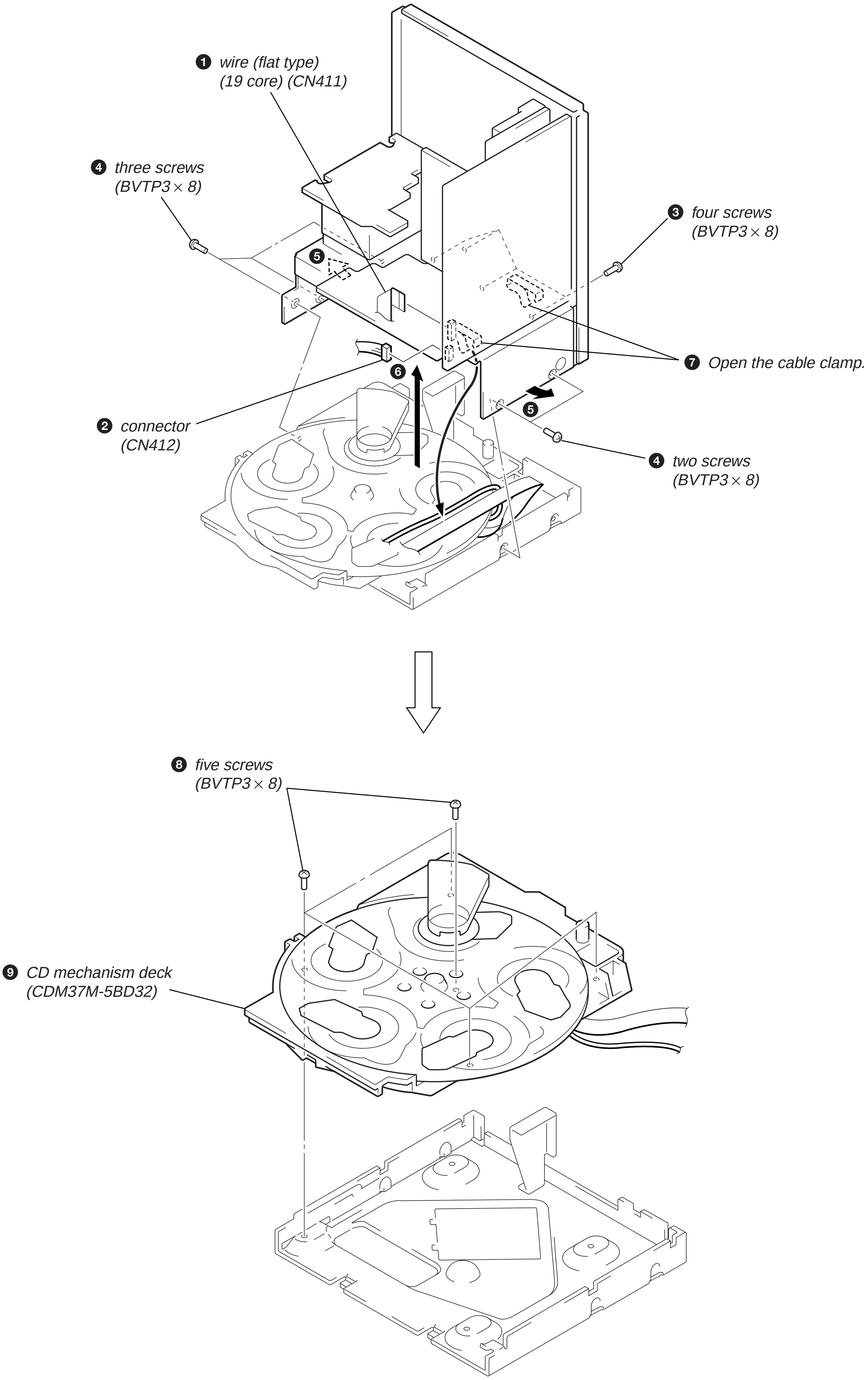
3-4. COVER (TC), TAPE MECHANISM DECK (TCM-230PWR42)



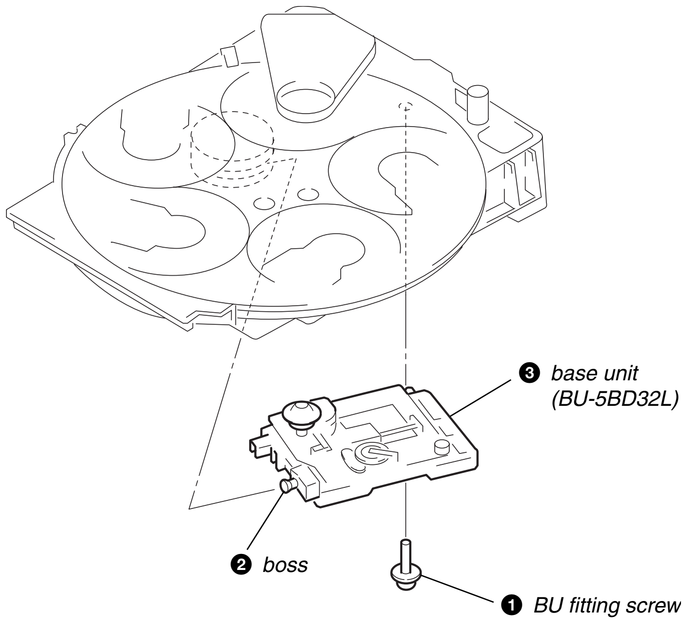
3-5. MAIN BOARD, FAN, D.C. (M901)



3-6. CD MECHANISM DECK (CDM37M-5BD32L)

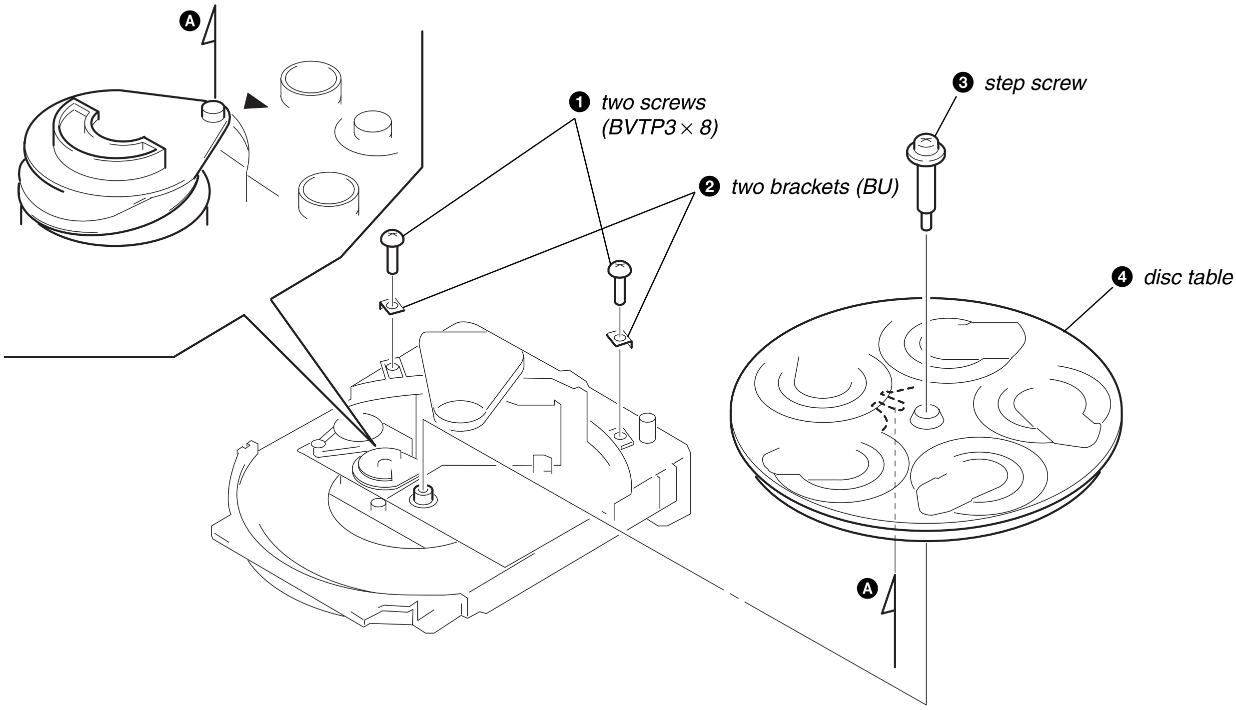


3-7. BASE UNIT (BU-5BD32L)



3-8. DISC TABLE

Note: When the disc table is installed, adjust the positions of roller cam and mark ▶ as shown in the figure, then set to the groove of disc table.



SECTION 4
TEST MODE

[MC Cold Reset]

- The cold reset clears all data including preset data stored in the RAM to initial conditions. Execute this mode when returning the set to the customer.

Procedure:

1. Turn the power ON or set to the DEMO mode.
2. Press three buttons of [⏲/CLOCK SET], [ENTER/NEXT], and [I/⏻] simultaneously.
3. The set is reset, and displays "COLD RESET", then becomes DEMO mode.

[MC Hot Reset]

- This mode resets the set with the preset data kept stored in the memory. The hot reset mode functions same as if the power cord is plugged in and out.

Procedure:

1. Turn the power ON or set to the DEMO mode.
2. Press three buttons of [⏲/CLOCK SET], [ENTER/NEXT], and [DISC 1] simultaneously.
3. The set is reset, and becomes standby state.

[Change-over the AM Tuning Interval]
(EXCEPT AEP, UK, and Saudi Arabia models)

- The AM tuning interval can be changed over 9 kHz or 10 kHz.

Procedure:

1. Press the [I/⏻] button to turn the power ON.
2. Select the function "TUNER", and press the [TUNER/BAND] button to select the BAND "AM".
3. Press the [I/⏻] button to turn the power OFF.
4. Press the [ENTER/NEXT] and [I/⏻] buttons simultaneously, and the display on the fluorescent indicator tube changes to "AM 9 K STEP" or "AM 10 K STEP", and thus the tuning interval is changed over.

[CD Delivery Mode]

- This mode moves the optical pick-up to the position durable to vibration. Use this mode when returning the set to the customer after repair.

Procedure:

1. Press the [I/⏻] button to turn the power ON.
2. Press the [LOOP] and [I/⏻] buttons simultaneously.
3. A message "LOCK" is displayed on the fluorescent indicator tube, and the CD delivery mode is set.

[LED and Fluorescent Indicator Tube All Lit, Key Check Mode]

Procedure:

1. Press three buttons of [⏲/CLOCK SET], [ENTER/NEXT], and [DISC 2] simultaneously.
2. LEDs and fluorescent indicator tube are all turned on.
   Press the [DISC 2] button, and the key check mode is activated.
3. In the key check mode, the fluorescent indicator tube displays "K 0 J0 V0". Each time a button is pressed, "K" value increases. However, once a button is pressed, it is no longer taken into account.
   "J" value increases like 1, 2, 3 ... if turn the JOG dial clockwise, or it decreases like 0, 9, 8 ... if turn the JOG dial counterclockwise.
   "V" value increases like 1, 2, 3 ... if turn the [VOLUME] dial clockwise, or it decreases like 0, 9, 8 ... if turn the JOG dial counterclockwise.
4. To release from this mode, press three buttons in the same manner as step 1, or disconnect the power cord.

[Aging Mode]

This mode can be used for operation check of tape deck section. Tape deck section work in parallel.

- If an error occurred:
  The aging operation stops and display then status.
- If no error occurs:
  The aging operation continues repeatedly.

Procedure:

1. Load the tapes into the decks A and B respectively.
2. Press the FUNCTION button to select the function “CD”.
3. Press the PLAY MODE button to set the “ALL DISCS” mode, and press the REPEAT button to “REPEAT” off.
4. Press three buttons of ◴ /CLOCK SET, ENTER/NEXT, and DISC 4 simultaneously.
5. The aging mode is activated, if the indicator of disc tray number on the fluorescent indicator tube is blinking.
6. To release from the aging mode, press the I/⏻ button to turn the power OFF and operate the cold reset. (Refer to the “MC Cold Reset”)

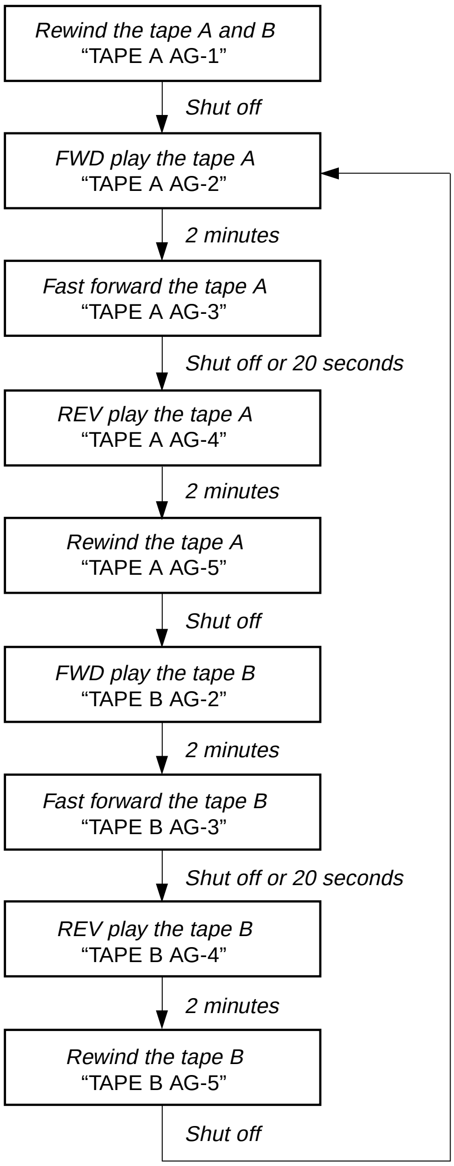
1. Display at the Aging Mode

- Display operating state of tape deck section alternately.
- If an error occurred, stop display.

2. Tape Deck Section

- The sequence during the aging mode is following as below.
- If an error occurred, stop display that step.

Aging mode sequence (Tape deck section) :



Note: “TAPE ∗ AG-∗” is display of each step.

SECTION 5
MECHANICAL ADJUSTMENTS

Precaution

1. Clean the following parts with a denatured alcohol-moistened swab:
   record/playback heads   pinch rollers
   erase head   rubber belts
   capstan   idlers
2. Demagnetize the record/playback head with a head demagnetizer.
3. Do not use a magnetized screwdriver for the adjustments.
4. After the adjustments, apply suitable locking compound to the parts adjusted.
5. The adjustments should be performed with the rated power supply voltage unless otherwise noted.

Torque Measurement

Mode	Torque Meter	Meter Reading
FWD	CQ-102C	3.1~6.96 mN•m (31 to 71 g•cm) (0.43 – 0.98 oz•inch)
FWD back tension	CQ-102C	0.20~0.58 mN•m (2 to 6 g•cm) (0.03 – 0.08 oz•inch)
REV	CQ-102RC	3.1~6.96 mN•m (31 to 71 g•cm) (0.43 – 0.98 oz • inch)
REV back tension	CQ-102RC	0.20~0.58 mN•m (2 to 6 g•cm) (0.03 – 0.08 oz • inch)
FF/REW	CQ-201B	6.97~14.02 mN•m (71 to 143 g•cm) (0.99 – 1.99 oz • inch)
FWD tension	CQ-403A	9.80 mN•m (100 g or more) (3.53 oz or more)
REV tension	CQ-403A	9.80 mN•m (100 g or more) (3.53 oz or more)

SECTION 6
ELECTRICAL ADJUSTMENTS

DECK SECTION   0 dB = 0.775 V

Precaution

1. Demagnetize the record/playback head with a head demagnetizer.
2. Do not use a magnetized screwdriver for the adjustments.
3. After the adjustments, apply suitable locking compound to the parts adjust.
4. The adjustments should be performed with the rated power supply voltage unless otherwise noted.
5. The adjustments should be performed in the order given in this service manual. (As a general rule, playback circuit adjustment should be completed before performing recording circuit adjustment.)
6. The adjustments should be performed for both L-CH and R-CH.
7. Switches and controls should be set as follows unless otherwise specified.
8. Set to the DOLBY NR OFF.
9. Set to the test mode.
   (1) Press the [I/⏻] button to turn the power ON.
   (2) Select the function “TAPE A or B”.
   (3) Press the button of [◷ /CLOCK SET], [ENTER/NEXT], and [DISC 3] simultaneously, to set the tape deck test mode and displays “TEST MODE” on the fluorescent indicator tube.
   (4) To release from the test mode, press the [I/⏻] button.

• Test Tape

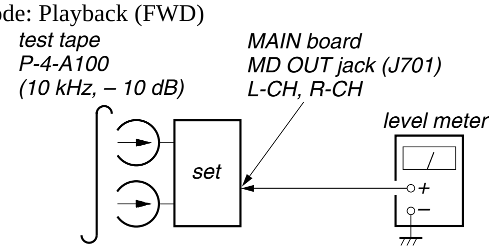
Tape	Signal	Used for
P-4-A100	10 kHz, – 10 dB	Azimuth Adjustment
WS-48B	3 kHz, 0 dB	Tape Speed Adjustment
P-4-L300	315 Hz, 0 dB	Playback Level Adjustment

Record/Playback Head Azimuth Adjustment

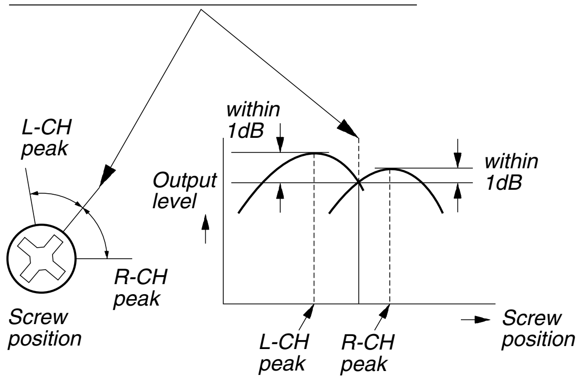
DECK A | DECK B

Note: Perform this adjustments for both decks
Procedure:

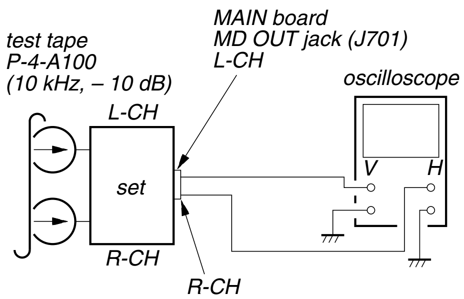
1. Mode: Playback (FWD)

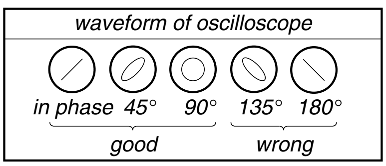


2. Turn the adjustment screw and check output peaks. If the peaks do not match for L-CH and R-CH, turn the adjustment screw so that outputs match within 1dB of peak.



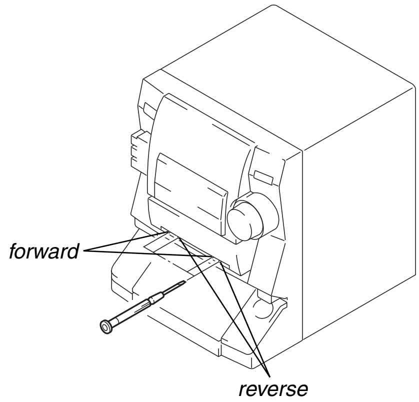
3. Mode: Playback





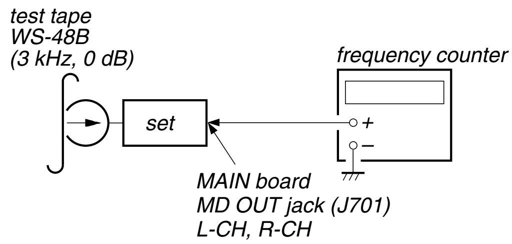
4. Repeat step 1 to 3 in playback (REV) mode.
5. After the adjustments, apply suitable locking compound to the pats adjusted.

Adjustment Location: Playback Head (Deck A).
Record/Playback/Erase Head (Deck B).



Tape Speed Adjustment DECK B

Mode: Playback

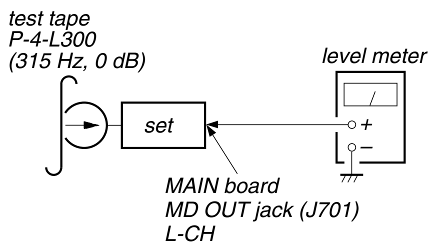


1. Insert the WS-48B into the deck B.
2. Press the ▷ button on the deck B.
3. Press the H SPEED DUB button in playback mode.
   Then at HIGH speed mode.
4. Adjust RV1001 on the LEAF SW board do that frequency counter reads 6,000 ± 180 Hz.
5. Press the H SPEED DUB button.
   Then back to NORMAL speed mode.
6. Adjust RV1002 on the LEAF SW board so that frequency counter reads 3,000 ± 90 Hz.

Adjustment Location: LEAF SW board
Sample value of Wow and Flutter: 0.3% or less W.RMS (JIS) (WS-48B)

Playback Level Adjustment DECK A | DECK B

Procedure:
Mode: Playback



Deck A is RV311 (L-CH), Deck B is RV301 (L-CH) so that adjustment within specification values as follows.

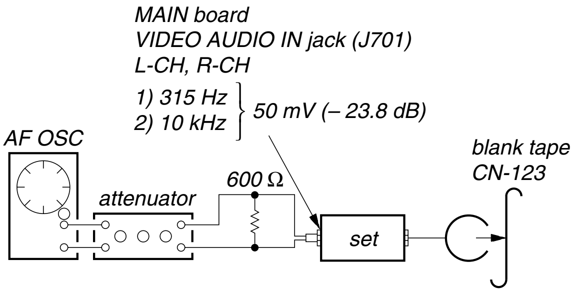
Specification Values:
J101 PB level: 301.5 to 338.3 mV (– 8.2 to – 7.2 dB) level difference between the channels: within ± 0.5 dB

Adjustment Location: AUDIO board

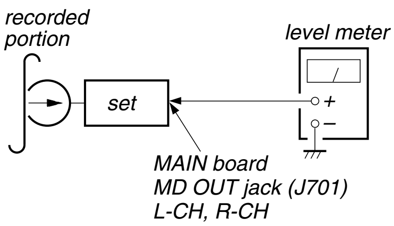
REC Bias Adjustment DECK B

Procedure:

1. Mode: Record
   FUNCTION: VIDEO



2. Mode: Playback



3. Confirm playback the signal recorded in step 1 become specification values as follows.
   If these values are out of specification values, adjust the RV341 (L-CH) and RV441 (R-CH) on the AUDIO board to repeat steps 1and 2.

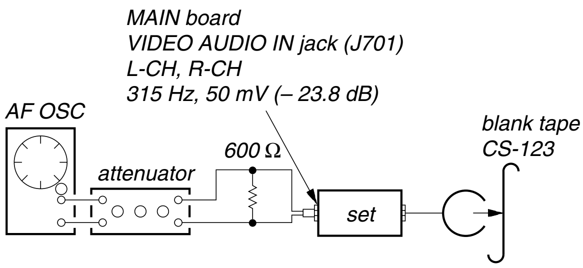
Specification values: Playback output of 315 Hz to playback output of 10 kHz: ± 0.5 dB

Adjustment Location: AUDIO board

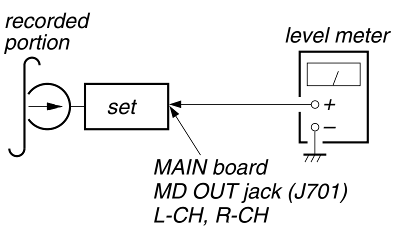
REC Level Adjustment DECK B

Procedure:

1. Mode: Record
   FUNCTION: VIDEO



2. Mode: Playback

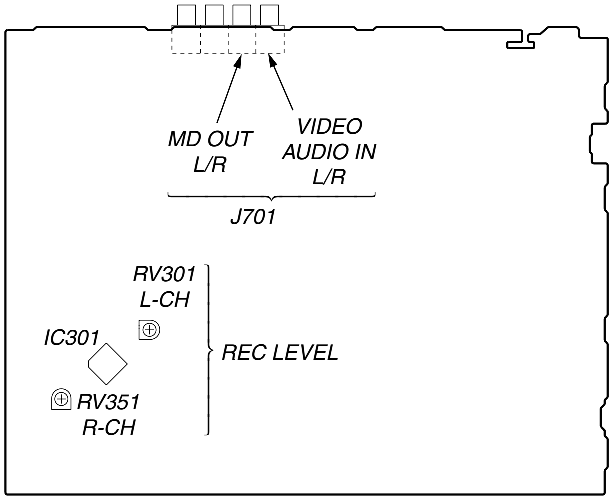


3. Confirm playback the signal recorded in step 1 become specification values as follows.
   If these values are out of specification values, adjust the RV301 (L-CH) and RV351 (R-CH) on the MAIN board to repeat steps 1 and 2.

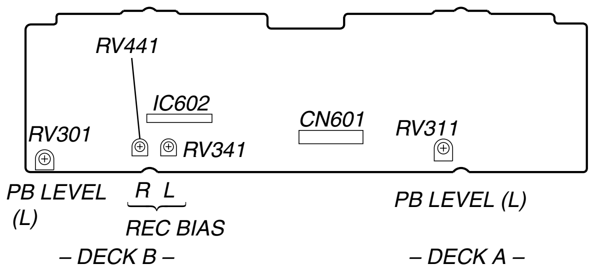
Specification values:
J101 PB level: 47.2 to 53.0 mV (– 24.3 to – 23.3 dB)

Adjustment Location: MAIN board

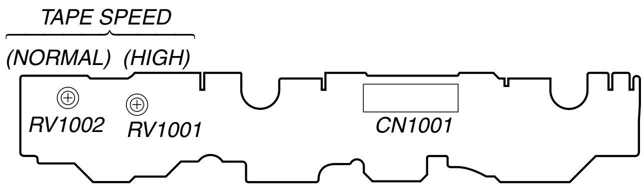
– MAIN BOARD (Conductor Side) –



– AUDIO BOARD (Component Side) –



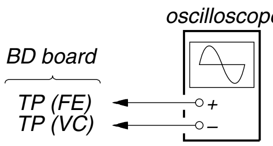
– LEAF SW BOARD (Component Side) –



CD SECTION

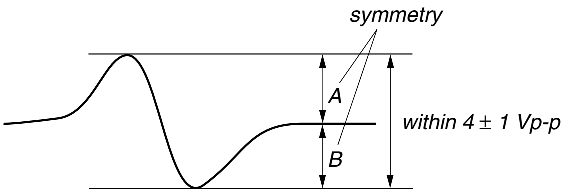
Note:
1. CD Block is basically designed to operate without adjustment. Therefore, check each item in order given.
2. Use YEDS-18 disc (3-702-101-01) unless otherwise indicated.
3. Use an oscilloscope with more than 10 MΩ impedance.
4. Clean the object lens by an applicator with neutral detergent when the signal level is low than specified value with the following checks.

S-Curve Check



Procedure:
1. Connect oscilloscope to TP (FE) and TP (VC).
2. Connect between TP (FE1) and TP (VC) by lead wire.
3. Connect between TP (AGCCON) and TP (GND) by lead wire.
4. Turn the power ON.
5. Load a disc (YEDS-18) and actuate the focus search. (In consequence of open and close the disc tray, actuate the focus search)
6. Cofirm that the oscilloscope waveform (S-curve) is symmetrical between A and B. And confirm peak to peak level within 4 ± 1 Vp-p.

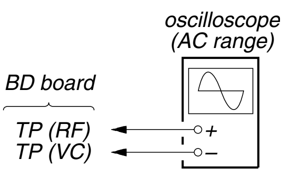
S-curve waveform



7. After check, remove the lead wire connected in step 2 and 3.

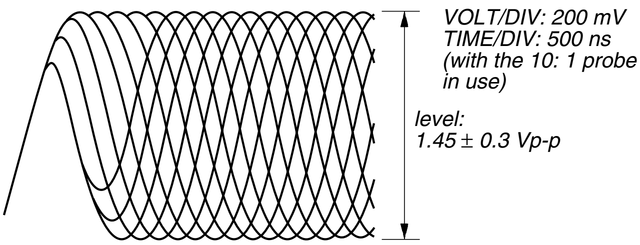
Note:
- Try to measure several times to make sure than the ratio of A : B or B : A is more than 10 : 7.
- Take sweep time as long as possible and light up the brightness to obtain best waveform.

RF Level Check

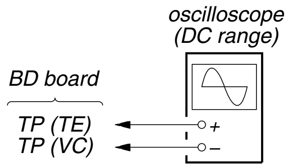


Procedure:
1. Connect oscilloscope to TP (RF) and TP (VC).
2. Connect between TP (AGCCON) and TP (GND) by lead wire.
3. Turn the power ON.
4. Load a disc (YEDS-18) and press the ▷ ❚❚ button to play.
5. Confirm that the oscilloscope waveform is clear and check RF signal level is correct or not.
6. After check, remove the lead wire connected in step 2.

Note: Clear RF signal waveform means that the shape "◇" can be clearly distinguished at the center of the waveform.

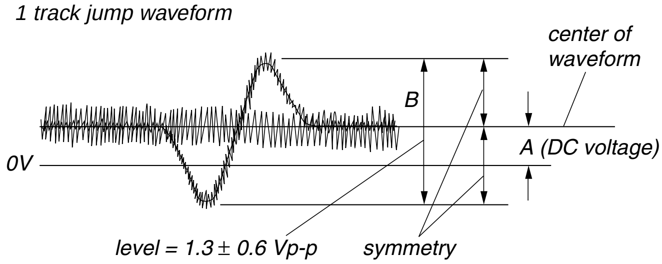


E-F Balance (1 Track Jump) Check



Procedure :
1. Connect oscilloscpe to TP (TE) and TP (VC).
2. Turn the power ON.
3. Load a disc (YEDS-18) and playback the number five track.
4. Press the ▷ ❚❚ button. (Becomes the 1 track jump mode)
5. Confirm that the level B and A (DC voltage) on the oscilloscope waveform.

1 track jump waveform

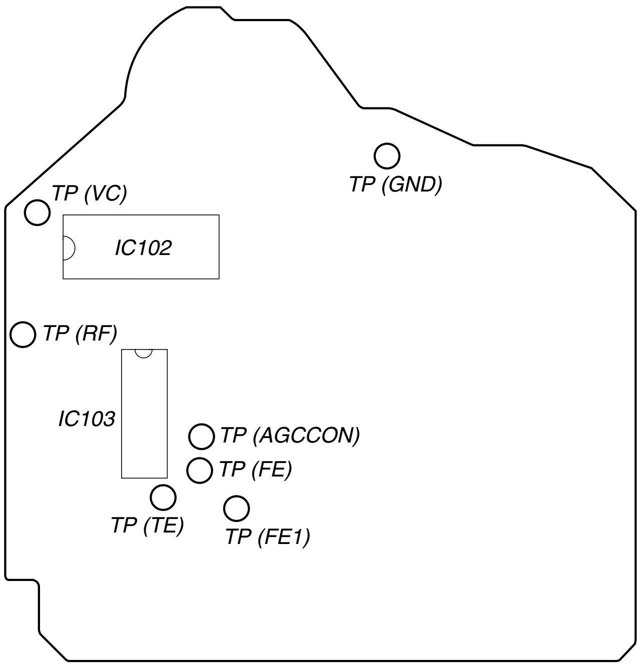


Specified level: $\frac{A}{B} \times 100$ = less than ± 22%

6. After check, remove the lead wire connected in step 1.

Checking Location:

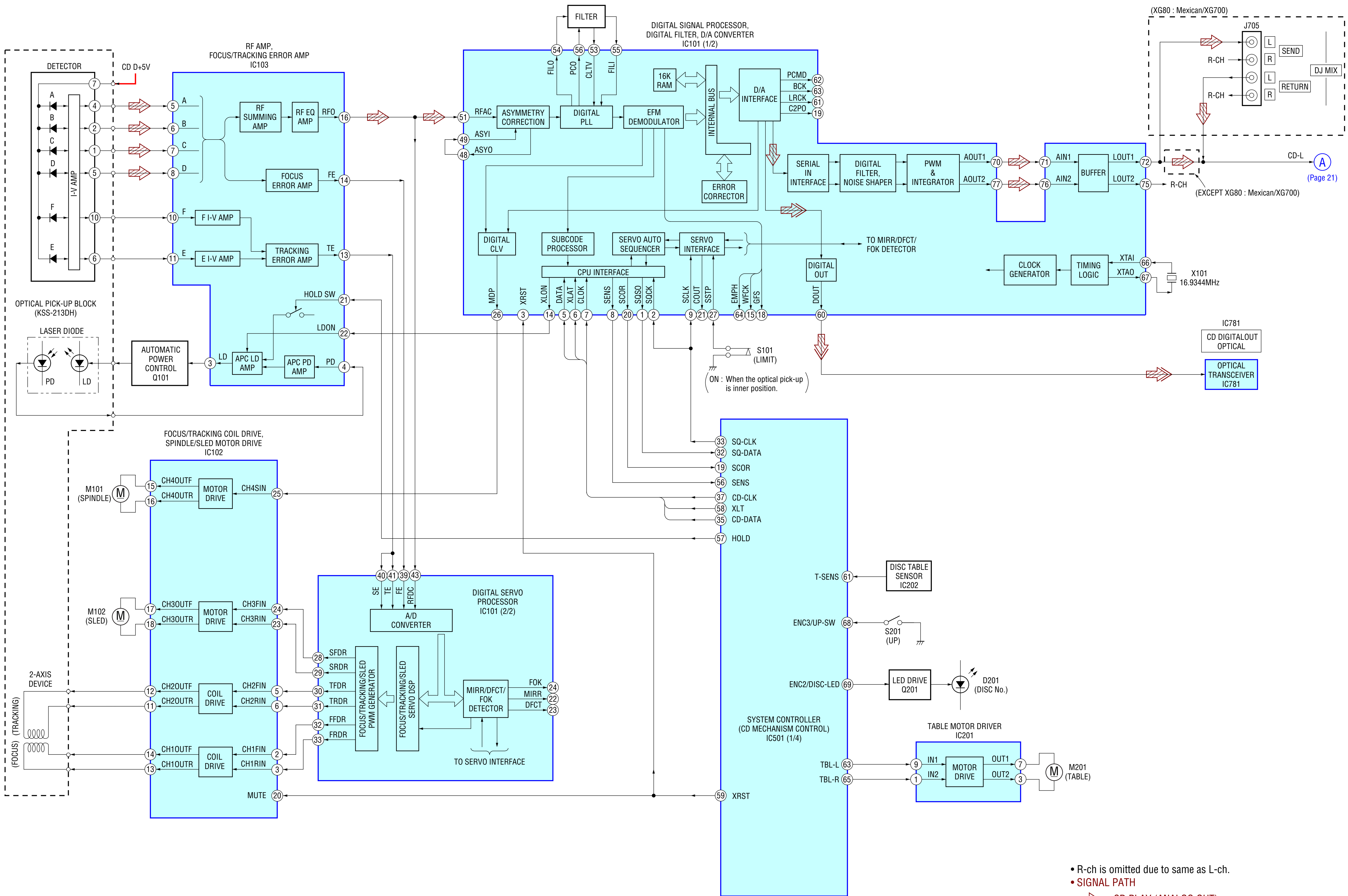
– BD BOARD (Side B) –



MEMO

SECTION 7
DIAGRAMS

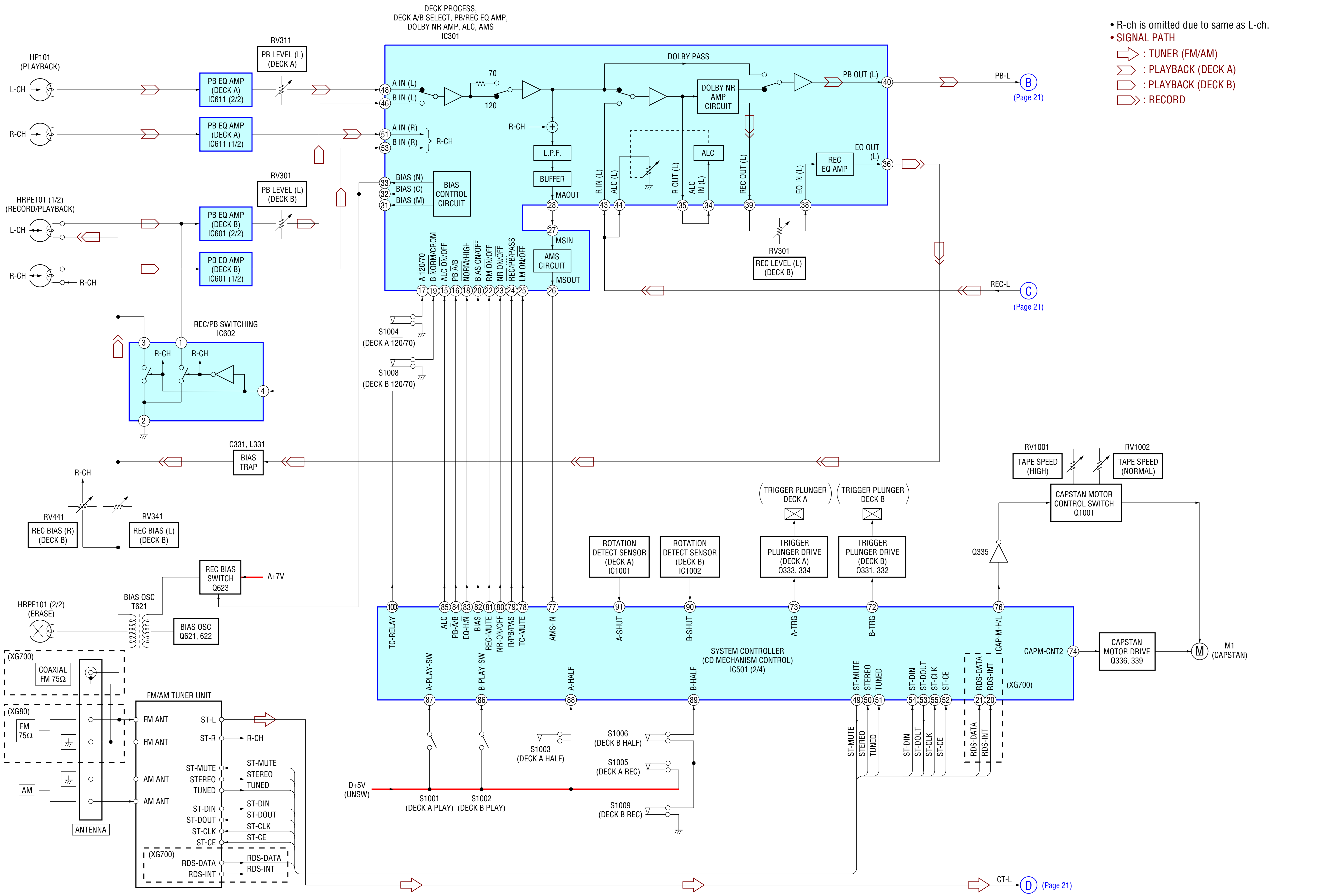
7-1. BLOCK DIAGRAM – CD SERVO Section –



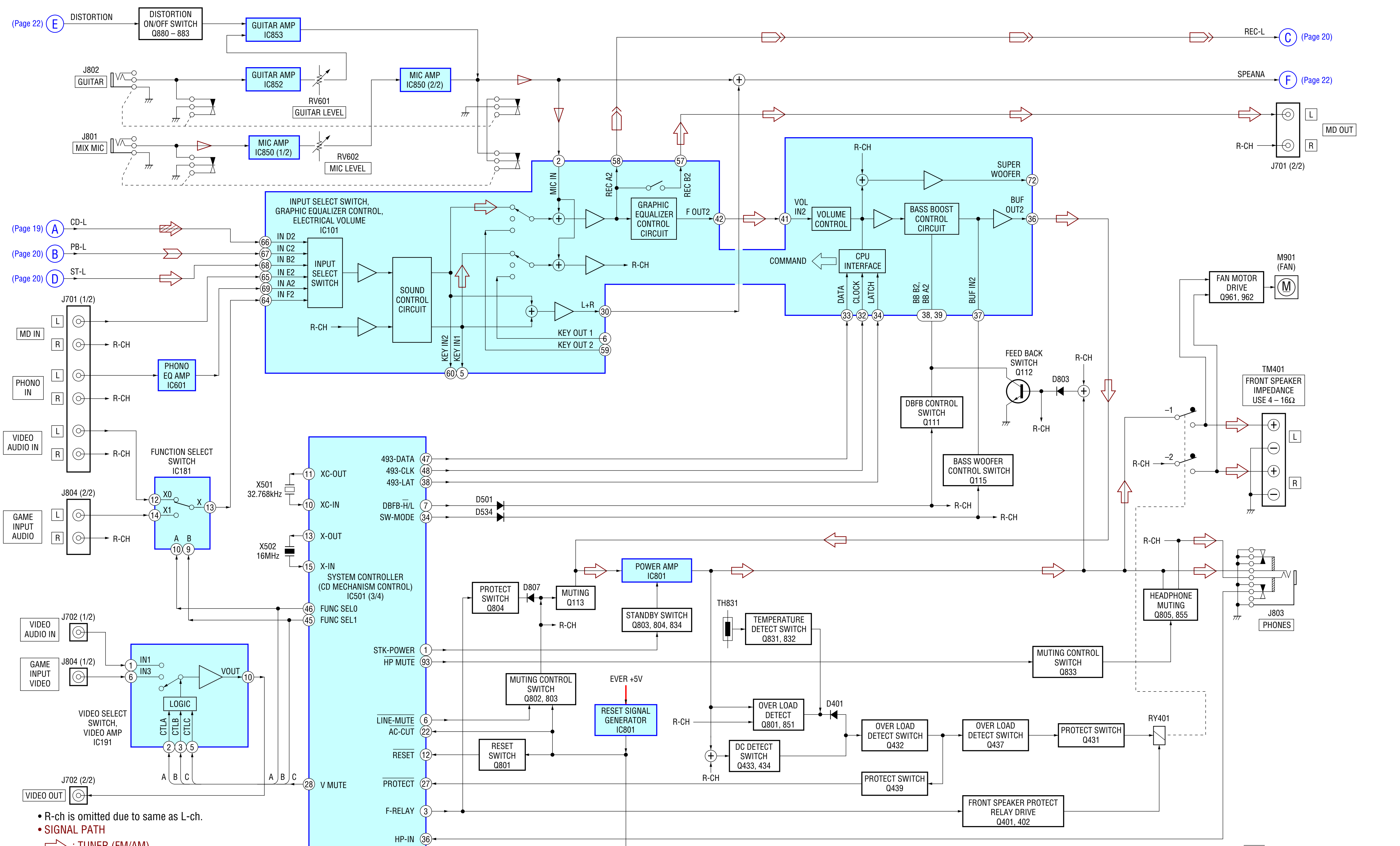
• R-ch is omitted due to same as L-ch.
• SIGNAL PATH
: CD PLAY (ANALOG OUT)
: CD PLAY (DIGITAL OUT)

7-2. BLOCK DIAGRAM – TUNER/TAPE DECK Section –

• R-ch is omitted due to same as L-ch.
• SIGNAL PATH
: TUNER (FM/AM)
: PLAYBACK (DECK A)
: PLAYBACK (DECK B)
: RECORD



7-3. BLOCK DIAGRAM – MAIN Section –



(Page 22) E · (Page 20) C · (Page 22) F · (Page 19) A · (Page 20) B · (Page 20) D · (Page 22) G

• R-ch is omitted due to same as L-ch.

• SIGNAL PATH

: TUNER (FM/AM)

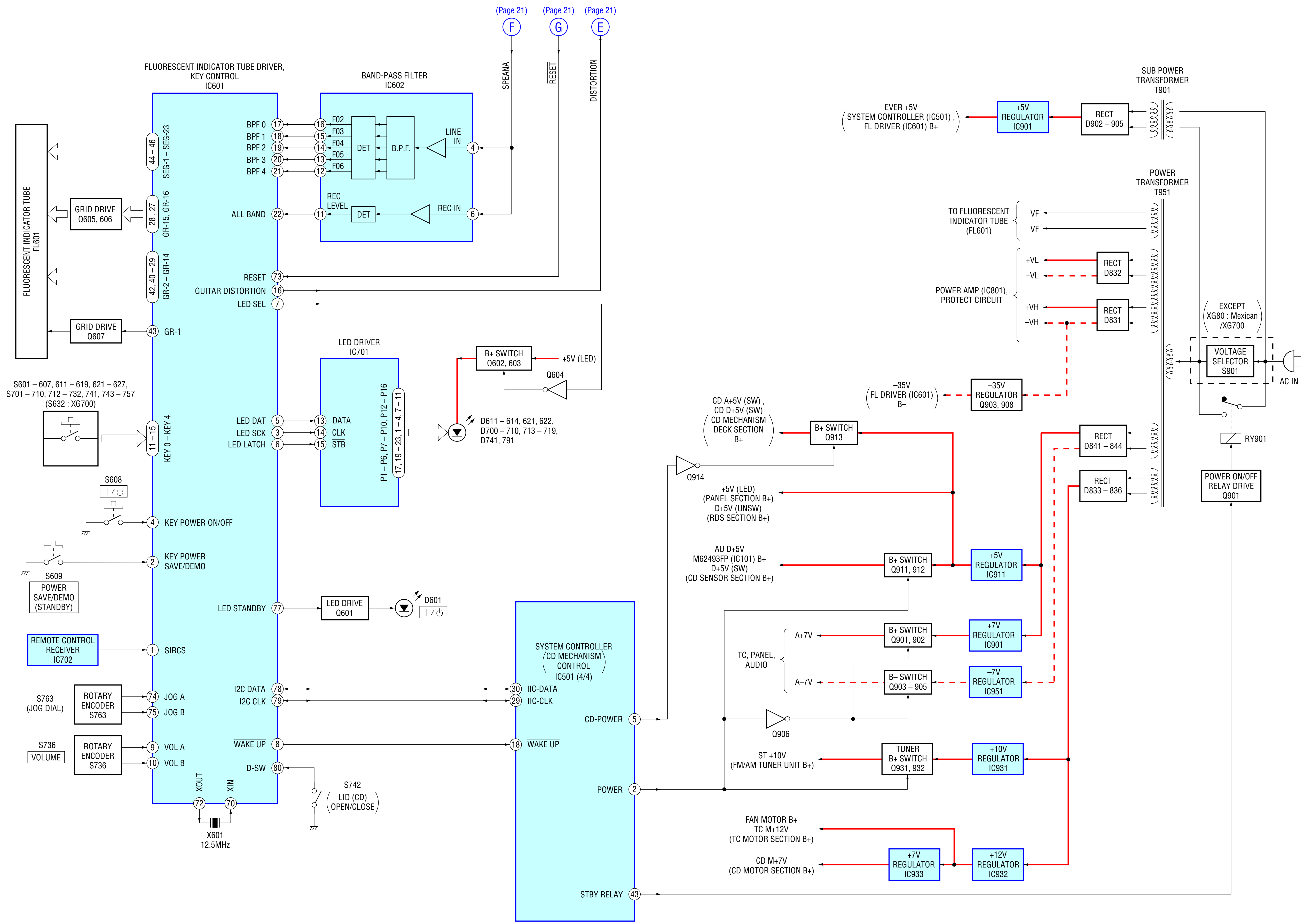
: CD PLAY

: TAPE PLAY

: RECORD

: MIC INPUT

7-4. BLOCK DIAGRAM – DISPLAY/KEY CONTROL/POWER SUPPLY Section –



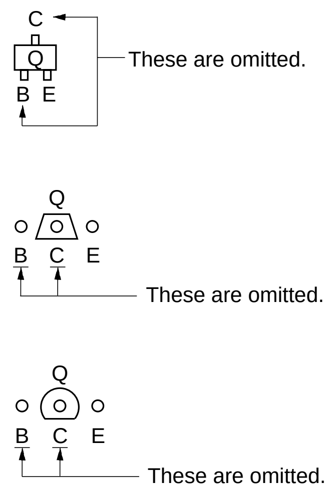
7-5. NOTE FOR PRINTED WIRING BOARDS AND SCHEMATIC DIAGRAMS

Note on Printed Wiring Board:
- : parts extracted from the component side.
- : parts extracted from the conductor side.
- : Pattern from the side which enables seeing.

(The other layers' patterns are not indicated.)

Caution:	
Pattern face side: (Side B)	Parts on the pattern face side seen from the pattern face are indicated.
Parts face side: (Side A)	Parts on the parts face side seen from the parts face are indicated.

- Indication of transistor.



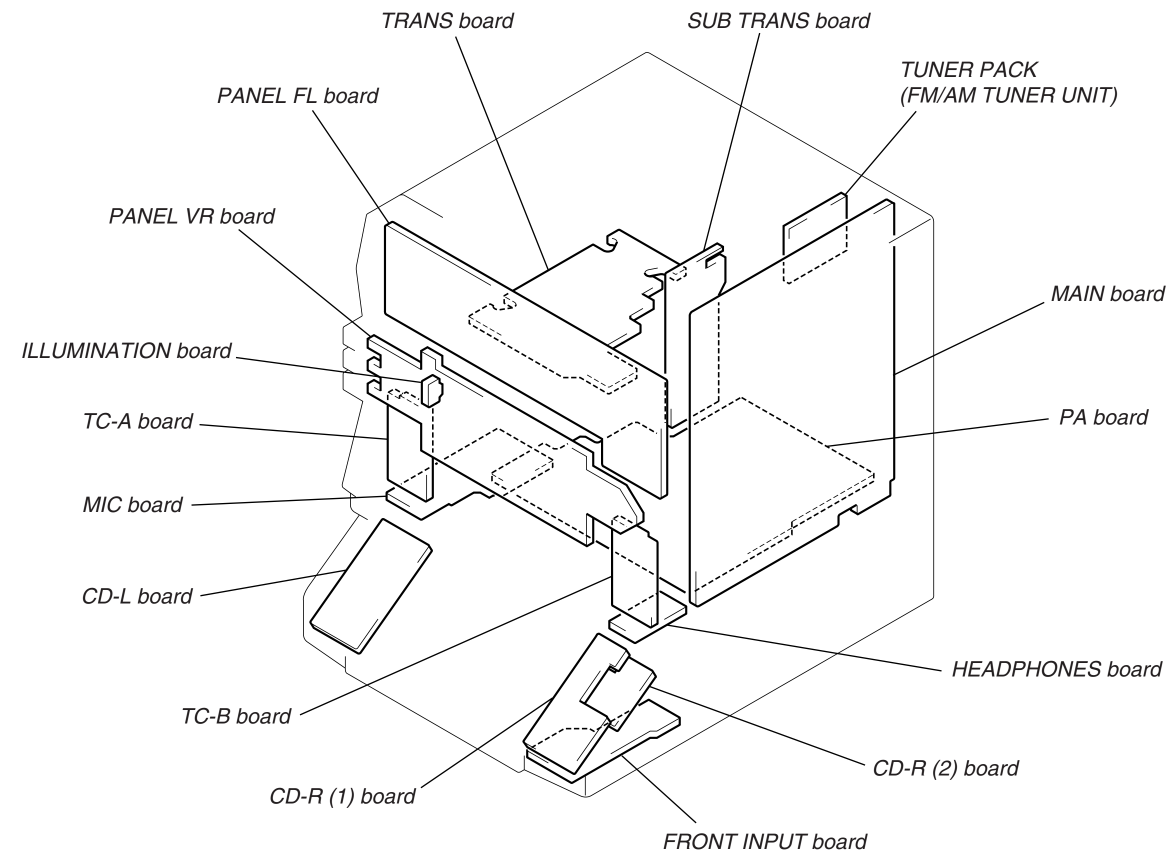
Note on Schematic Diagram:
- All capacitors are in μF unless otherwise noted. pF: μμF 50 WV or less are not indicated except for electrolytics and tantalums.
- All resistors are in Ω and 1/4 W or less unless otherwise specified.
- : nonflammable resistor.
- : fusible resistor.
- : panel designation.

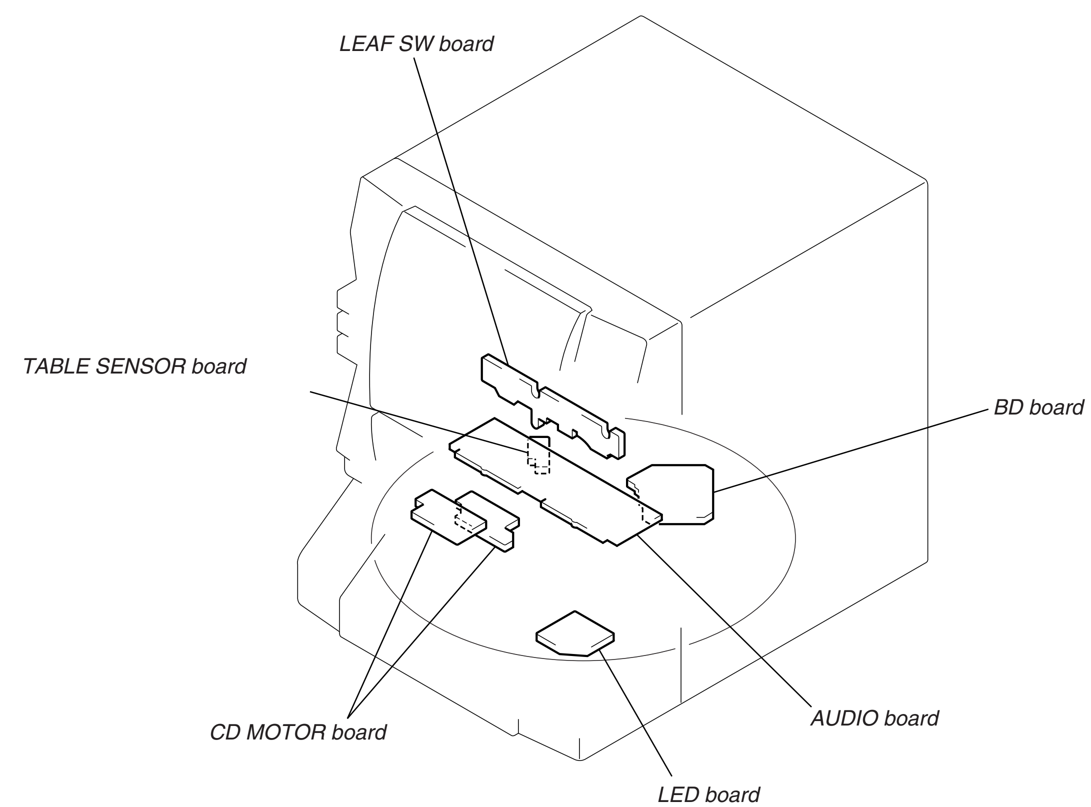
Note: The components identified by mark ⚠ or dotted line with mark ⚠ are critical for safety.
Replace only with part number specified.

- : B+ Line.
- : B– Line.
- : adjustment for repair.
- Voltages are taken with a VOM (Input impedance 10 MΩ). Voltage variations may be noted due to normal production tolerances.
- Waveforms are taken with a oscilloscope. Voltage variations may be noted due to normal production tolerances.
- Circled numbers refer to waveforms.
- Signal path.
  - : TUNER (FM/AM)
  - : TAPE PLAY (DECK A)
  - : TAPE PLAY (DECK B)
  - : RECORD
  - : CD PLAY (ANALOG OUT)
  - : CD PLAY (DEGITAL OUT)
  - : MIC INPUT
- Abbreviation

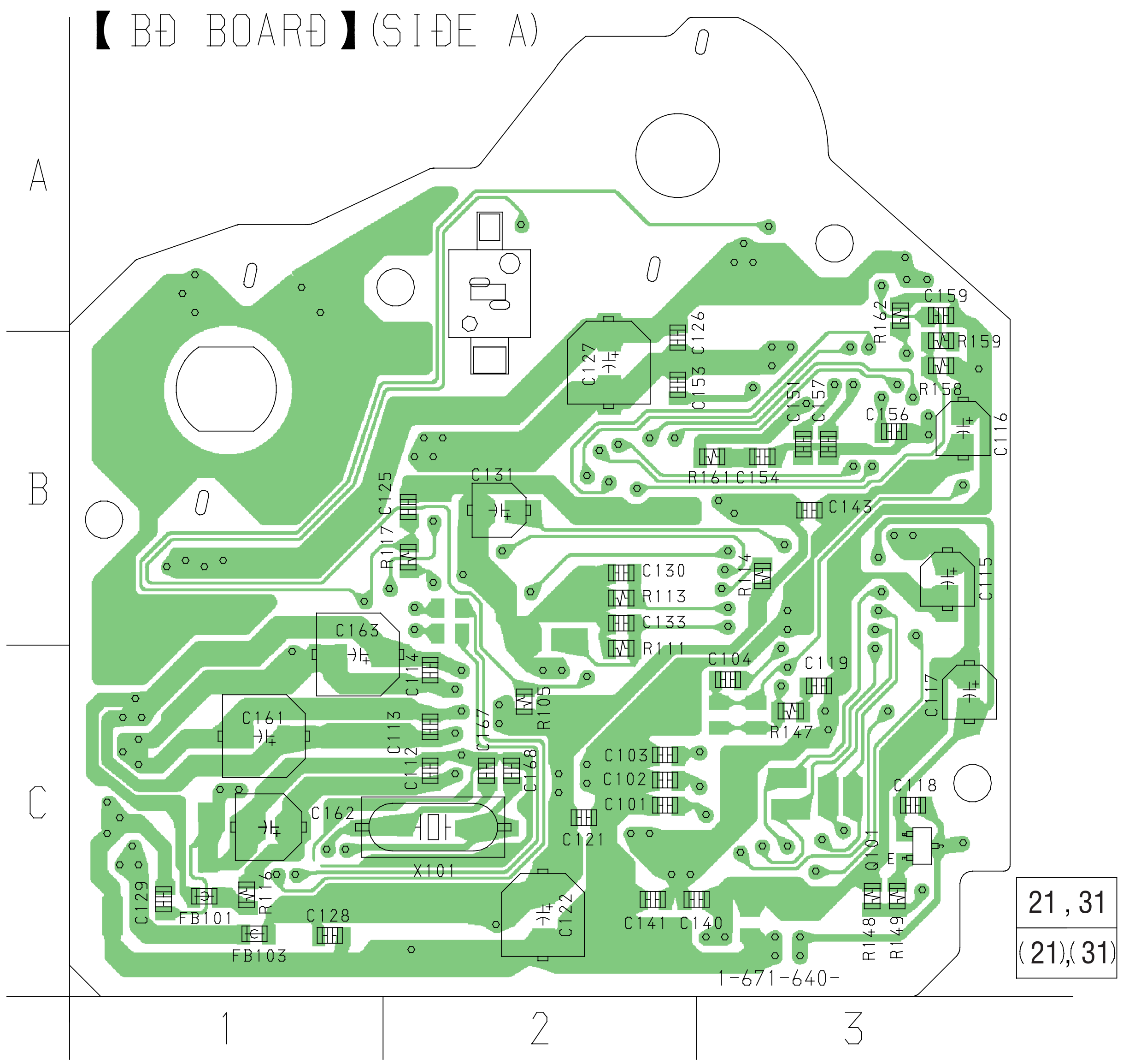
AR	: Argentina model
E2	: 120 V AC area in E model
EA	: Saudi Arabia model
MX	: Mexican model
SP	: Singapore model

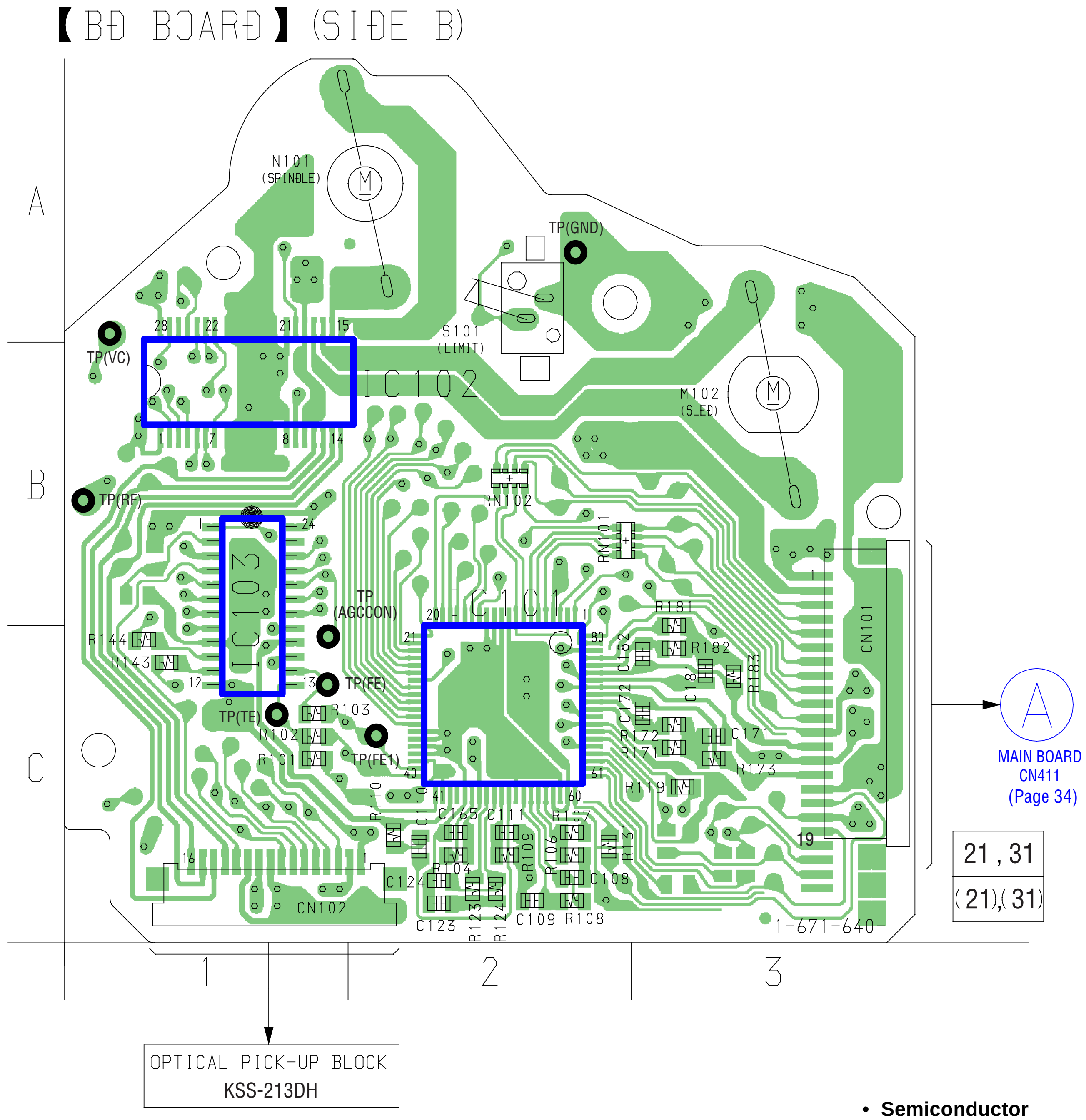
- **Circuit Boards Location**





7-6. PRINTED WIRING BOARD – BD Board – • See page 23 for Circuit Boards Location.





• **Semiconductor Location**

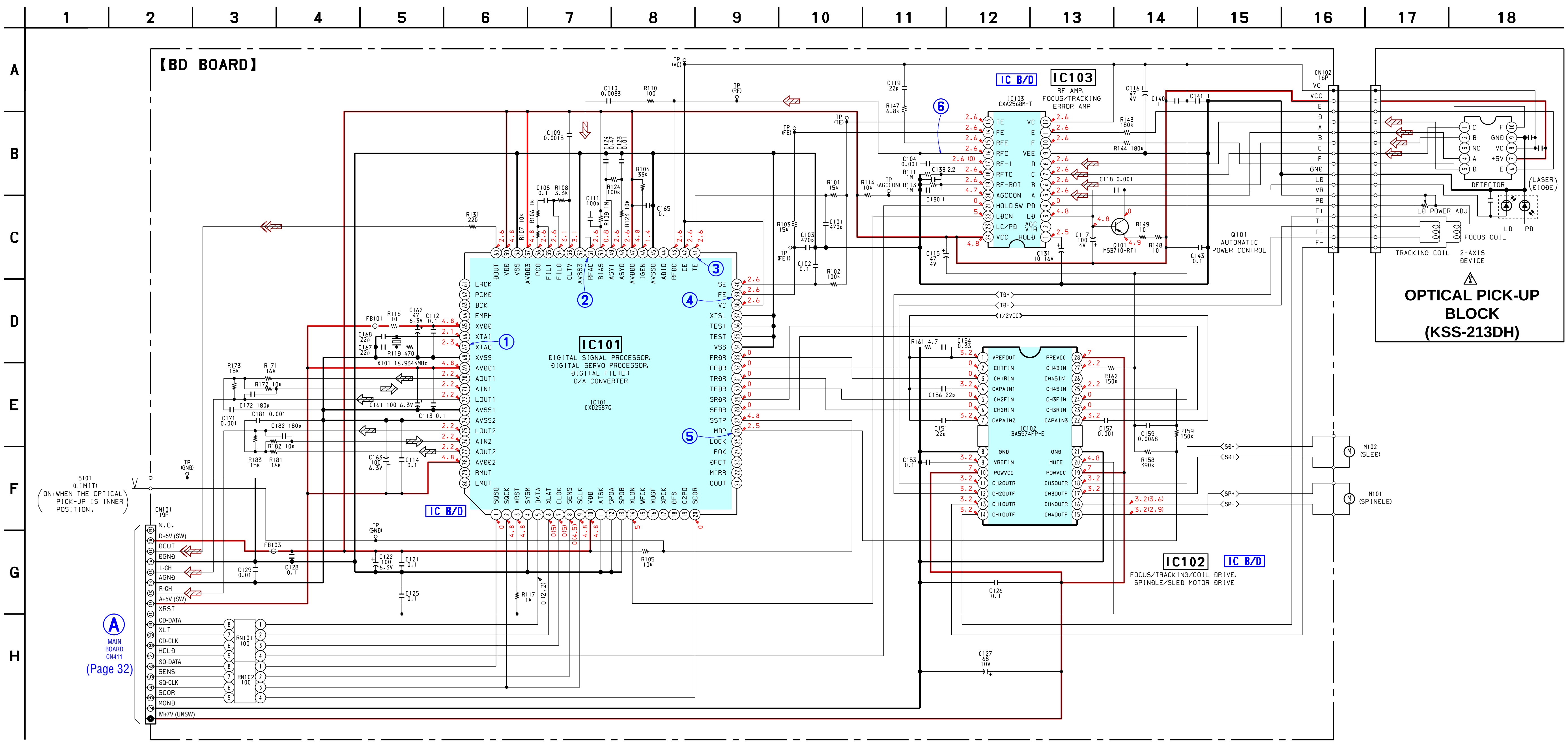
Ref. No.	Location
Q101	C-3

• **Semiconductor Location**

Ref. No.	Location
IC101	C-2
IC102	B-1
IC103	B-1

7-7. SCHEMATIC DIAGRAM – BD Board –

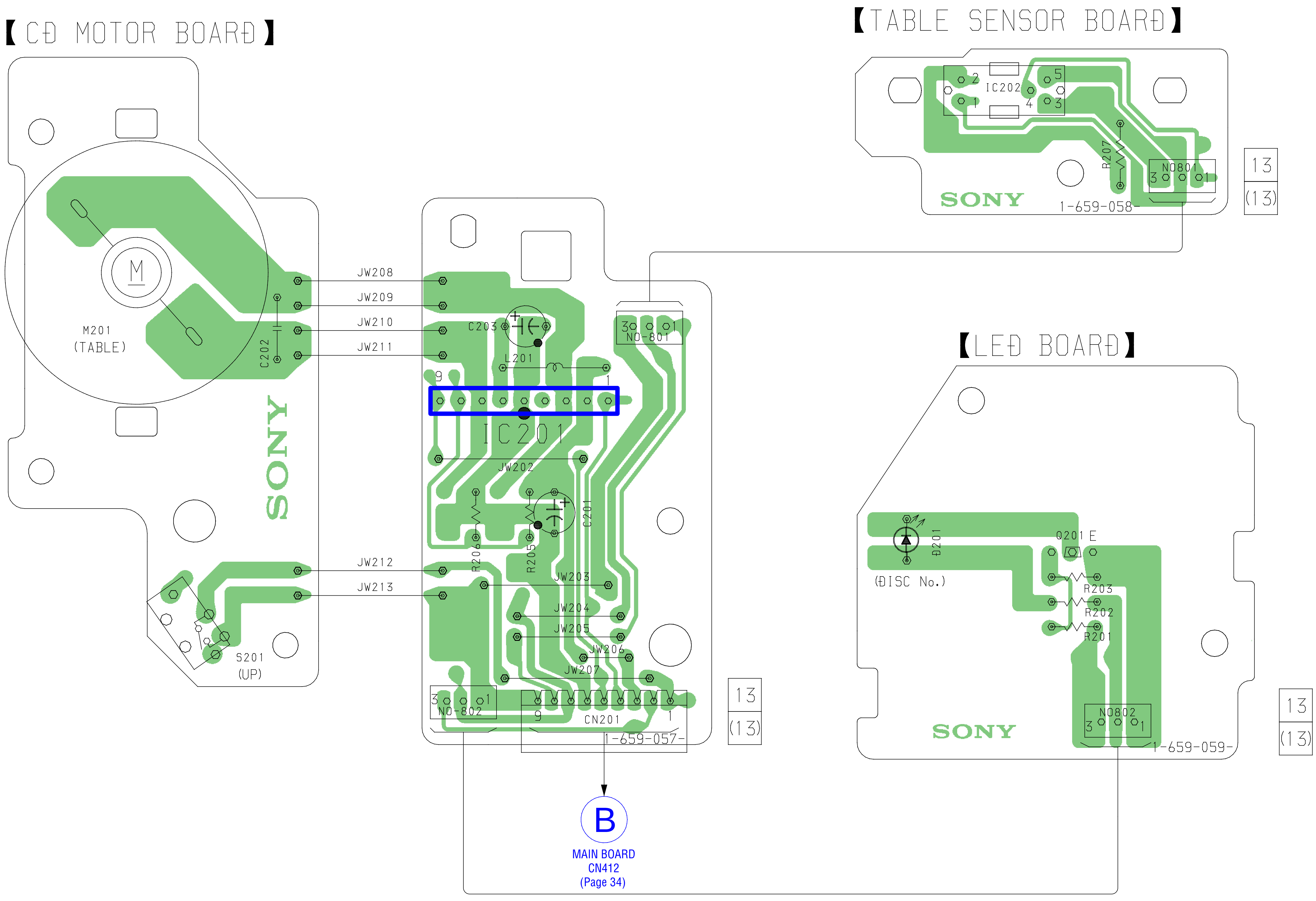
• See page 35 for Waveforms. • See page 47 for IC Block Diagrams.



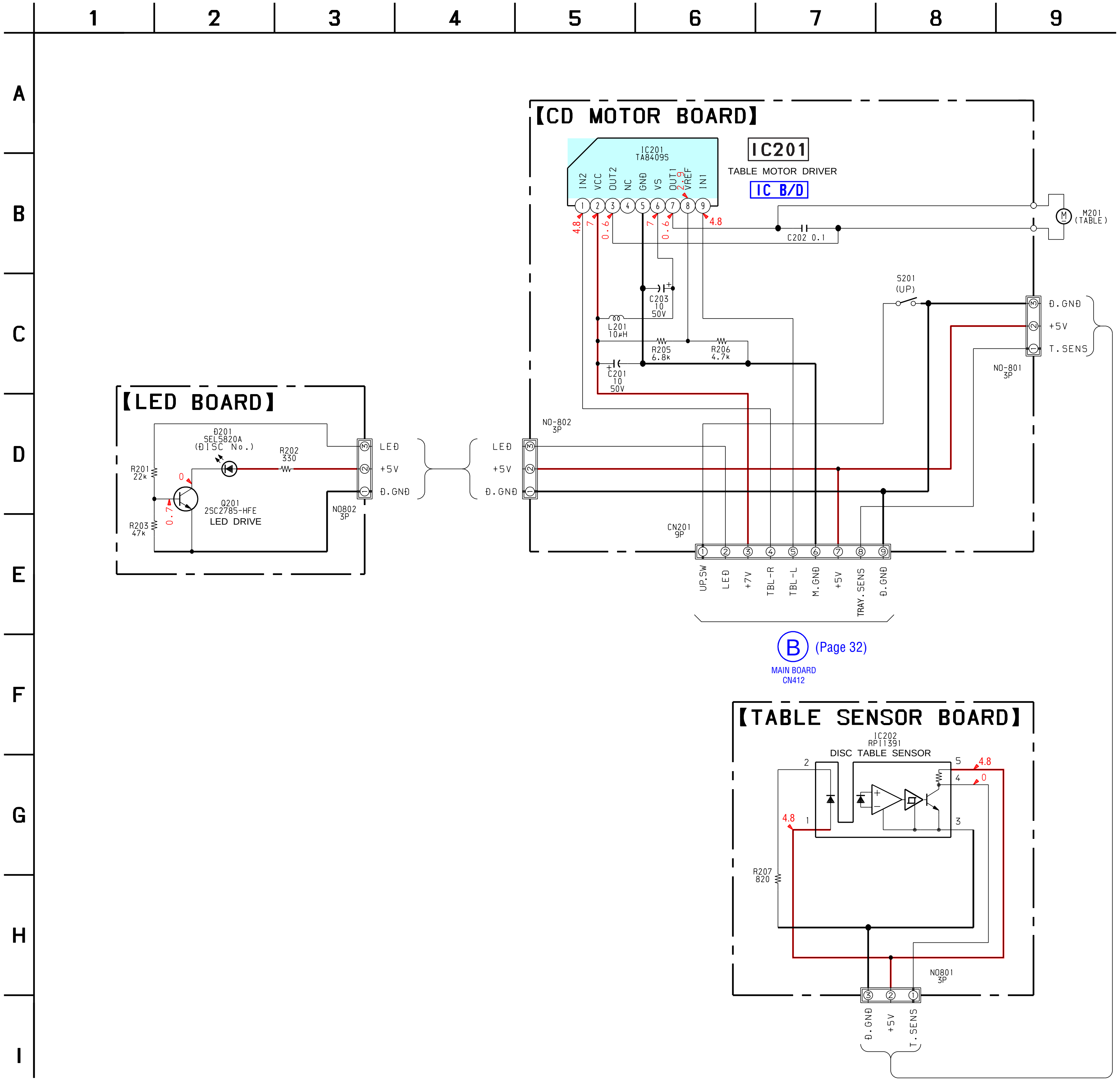
• Voltages and waveforms are dc with respect to ground under no-signal conditions.
no mark : CD STOP
( ) : CD PLAY

The components identified by mark ⚠ or dotted line with mark ⚠ are critical for safety.
Replace only with part number specified.

7-8. PRINTED WIRING BOARDS – CD MOTOR Section – • See page 23 for Circuit Boards Location.

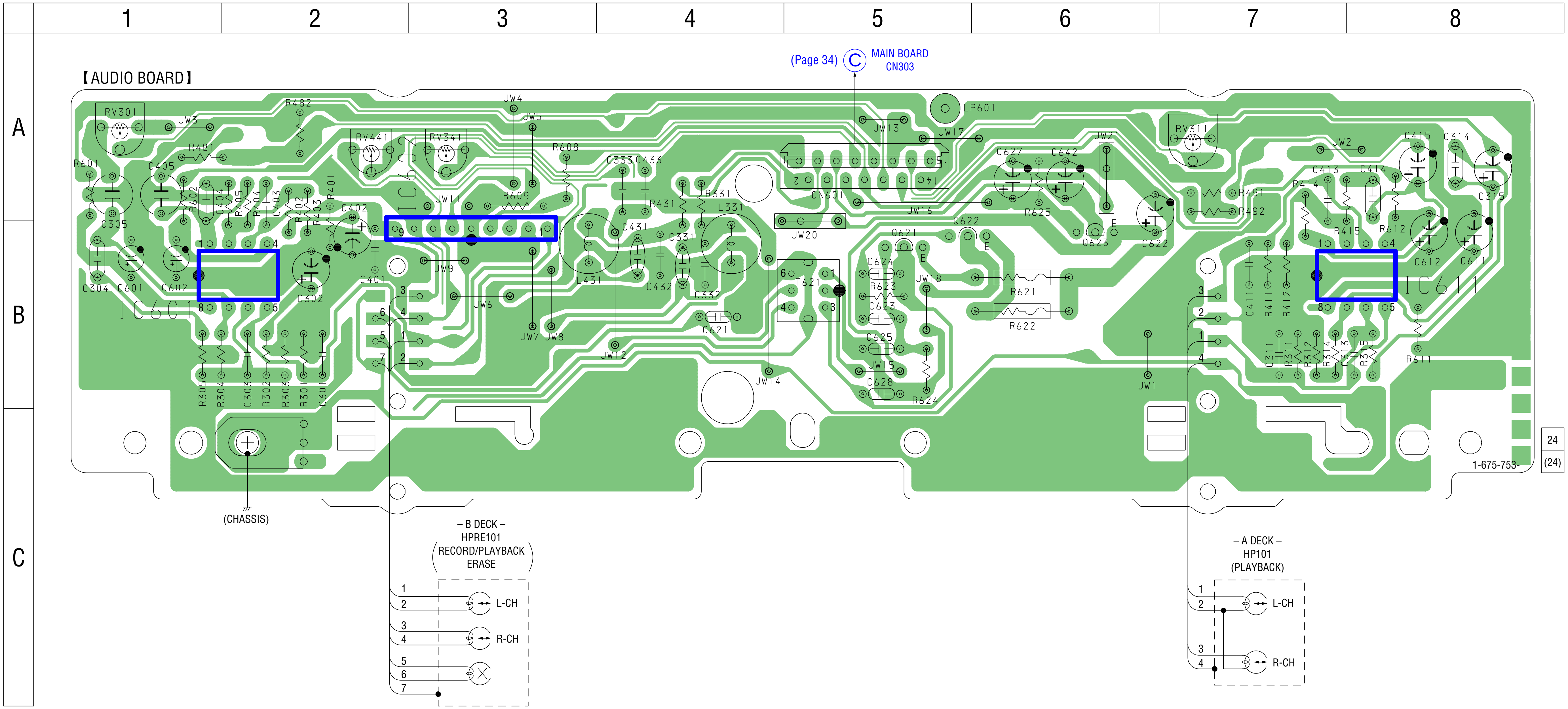


7-9. SCHEMATIC DIAGRAM – CD MOTOR Section – • See page 47 for IC Block Diagram.



• Voltages and waveforms are dc with respect to ground under no-signal conditions.
no mark : CD STOP

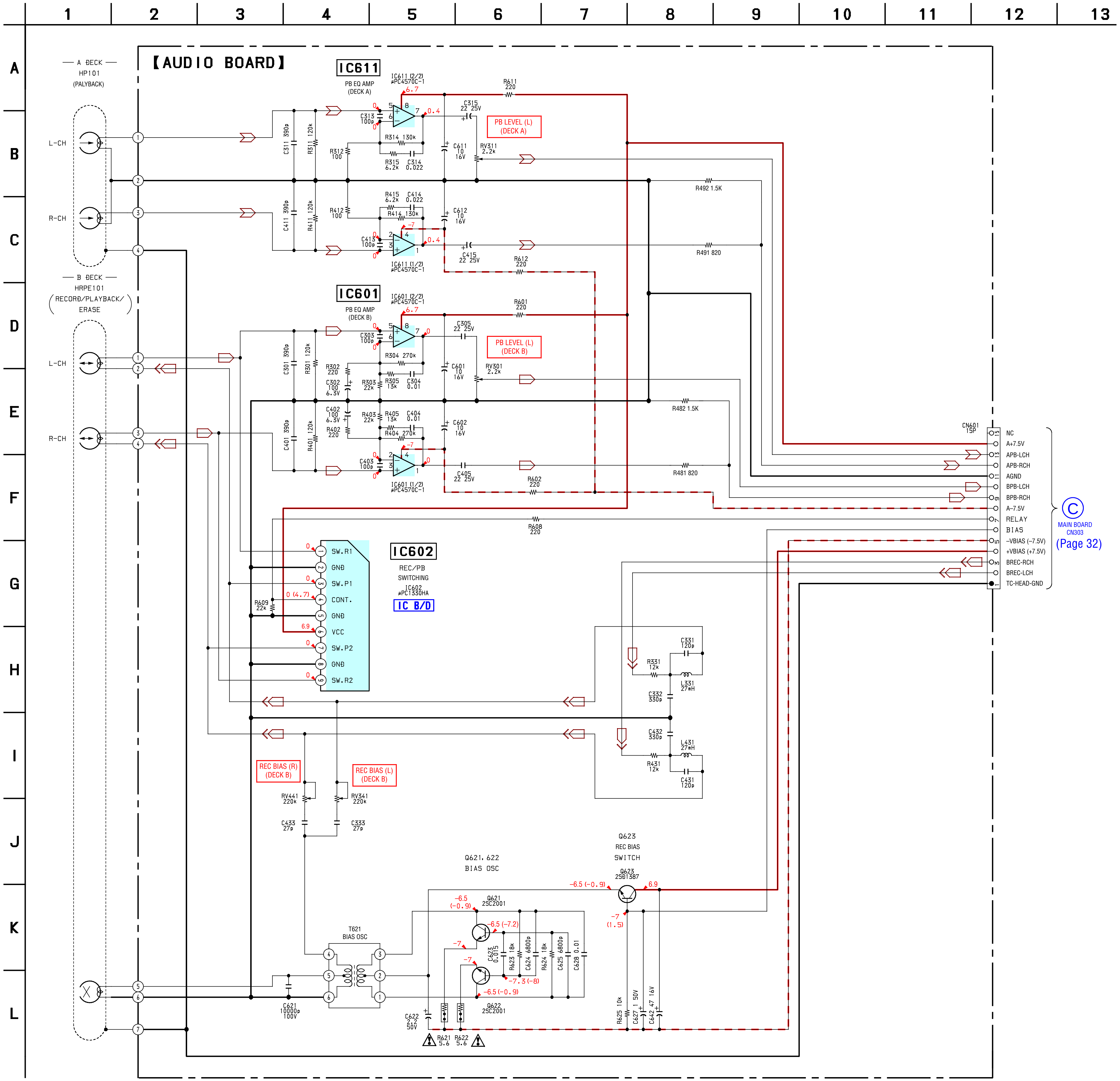
7-10. PRINTED WIRING BOARD – AUDIO Board – • See page 23 for Circuit Boards Location.



• **Semiconductor Location**

Ref. No.	Location
IC601	B-2
IC602	B-3
IC611	B-8
Q621	B-5
Q622	B-5
Q623	B-6

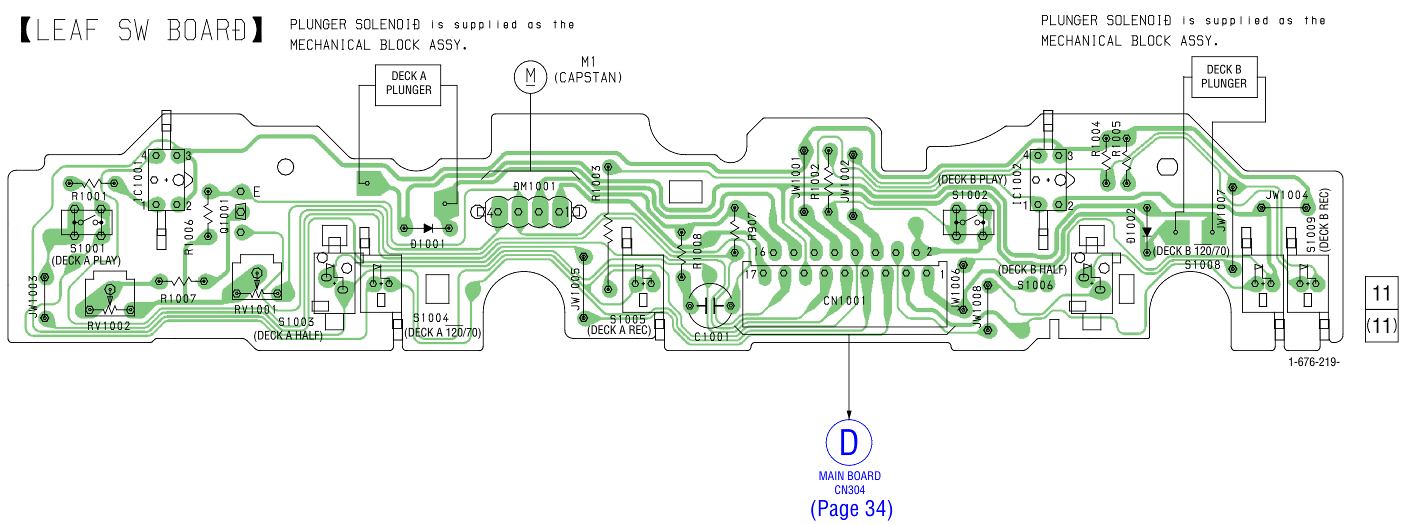
7-11. SCHEMATIC DIAGRAM – AUDIO Board – • See page 47 for IC Block Diagram.



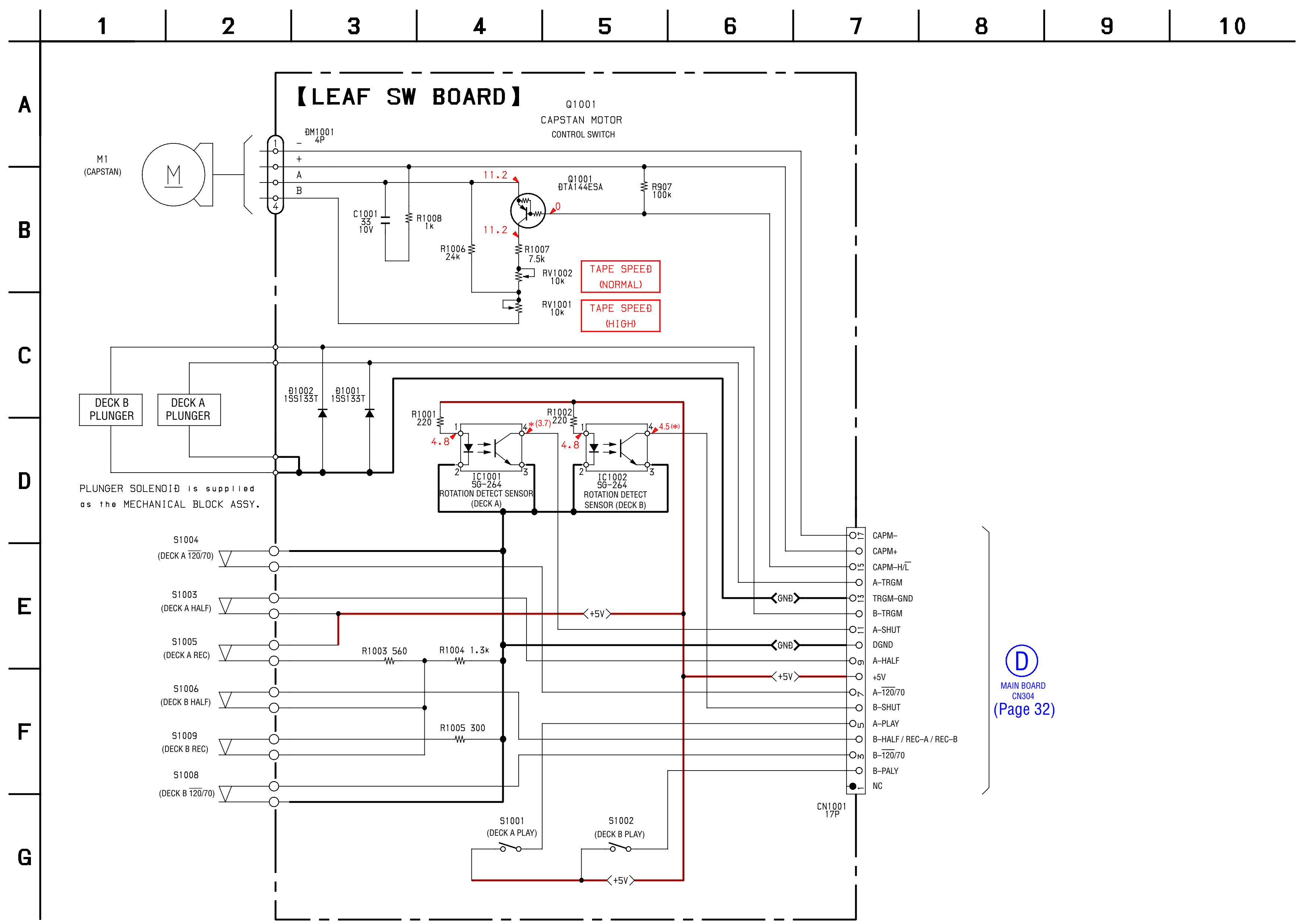
• Voltages and waveforms are dc with respect to ground under no-signal conditions.
no mark : TAPE PLAY
( ) : RECORD

The components identified by mark ⚠ or dotted line with mark ⚠ are critical for safety.
Replace only with part number specified.

7-12. PRINTED WIRING BOARD – LEAF SW Board – • See page 23 for Circuit Boards Location.



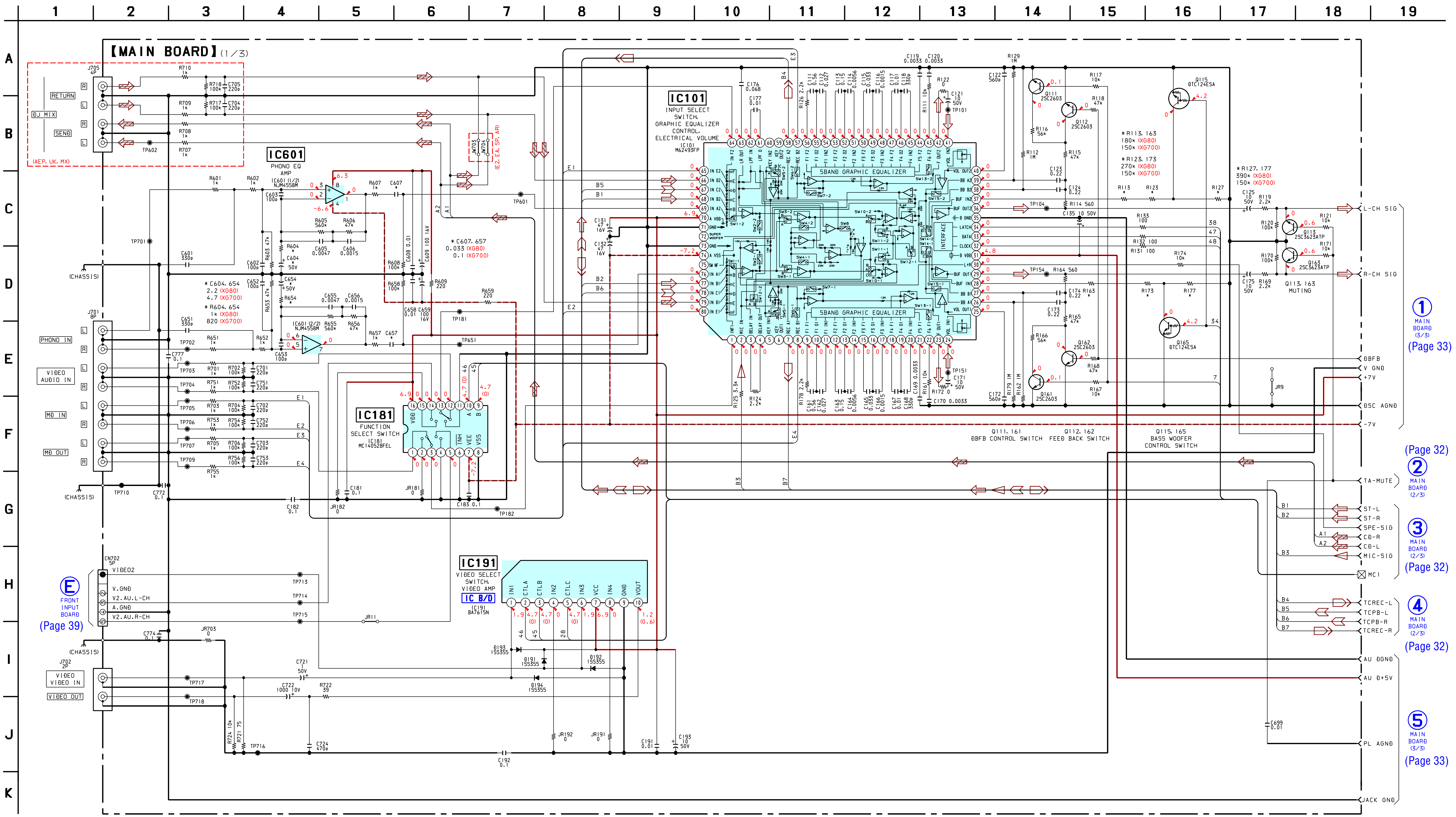
7-13. SCHEMATIC DIAGRAM – LEAF SW Board –



• Voltages and waveforms are dc with respect to ground under no-signal conditions.
no mark : TAPE PLAY (DECK A)
( ) : TAPE PLAY (DECK B)
∗ : Impossible to measure

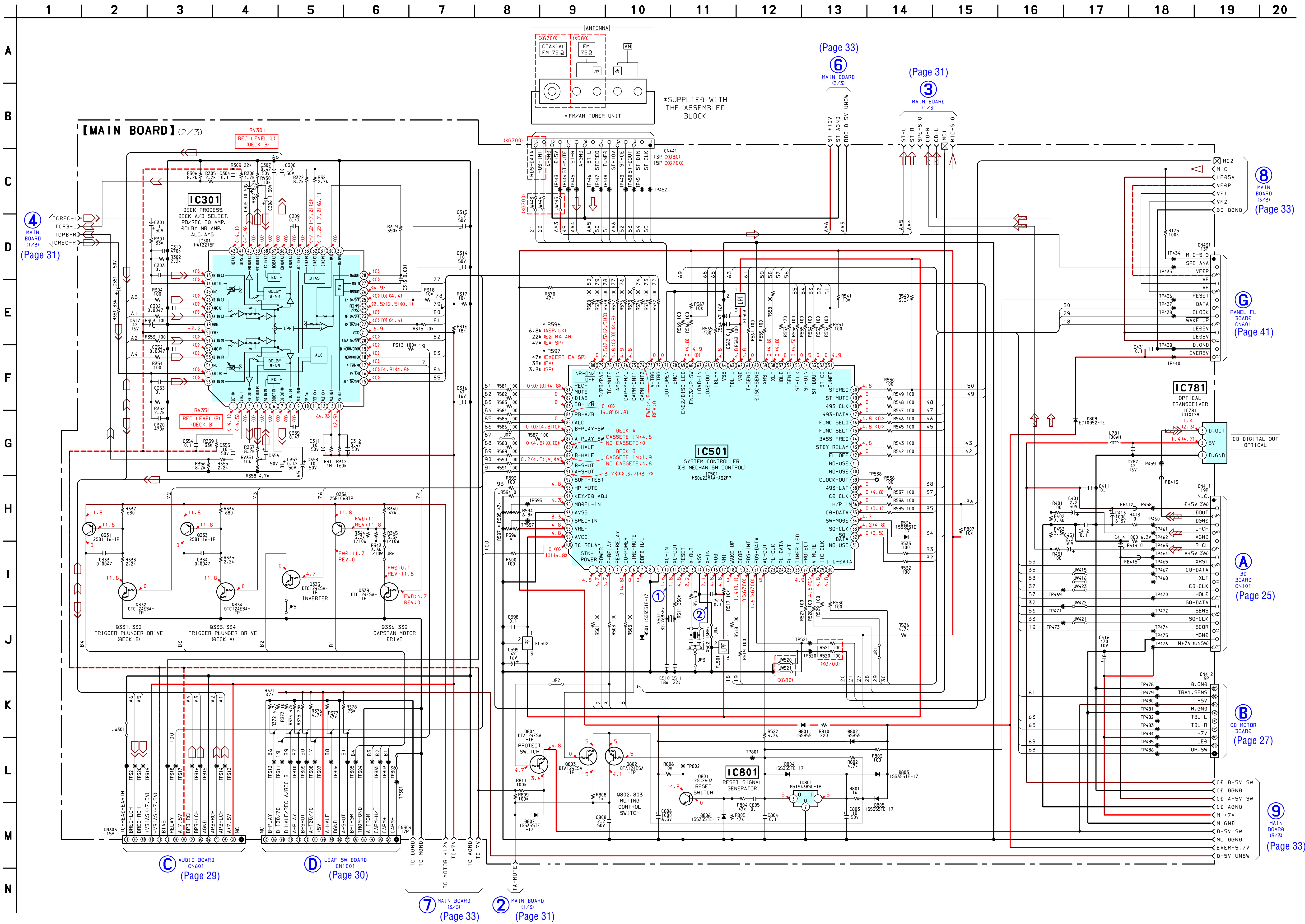
7-14. SCHEMATIC DIAGRAM – MAIN Board (1/3) –

• See page 47 for IC Block Diagram.



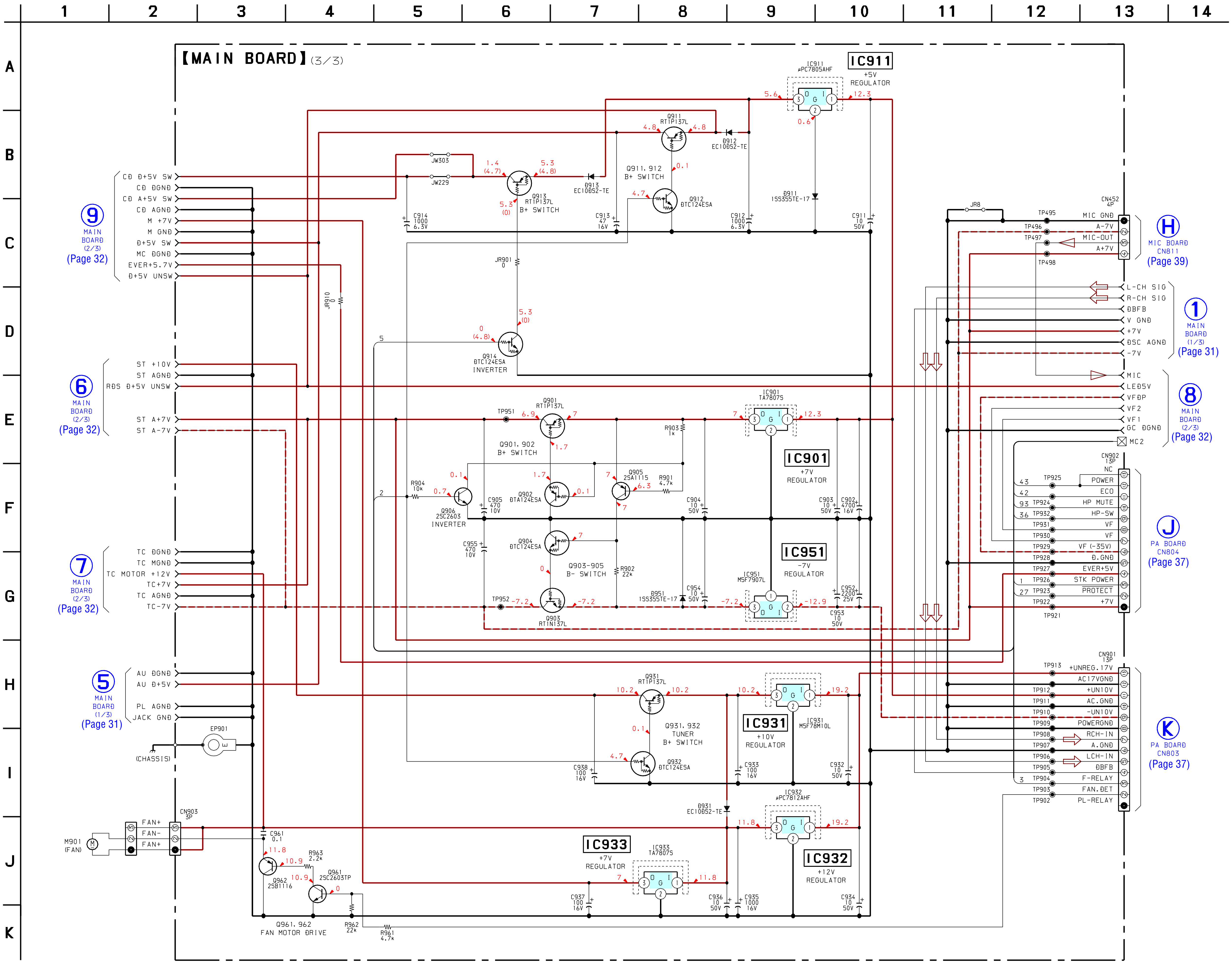
• Voltages and waveforms are dc with respect to ground under no-signal (detuned) conditions.
no mark : TUNER (FM/AM)
( ) : VIDEO

7-15. SCHEMATIC DIAGRAM – MAIN Board (2/3) – • See page 35 for Waveforms.



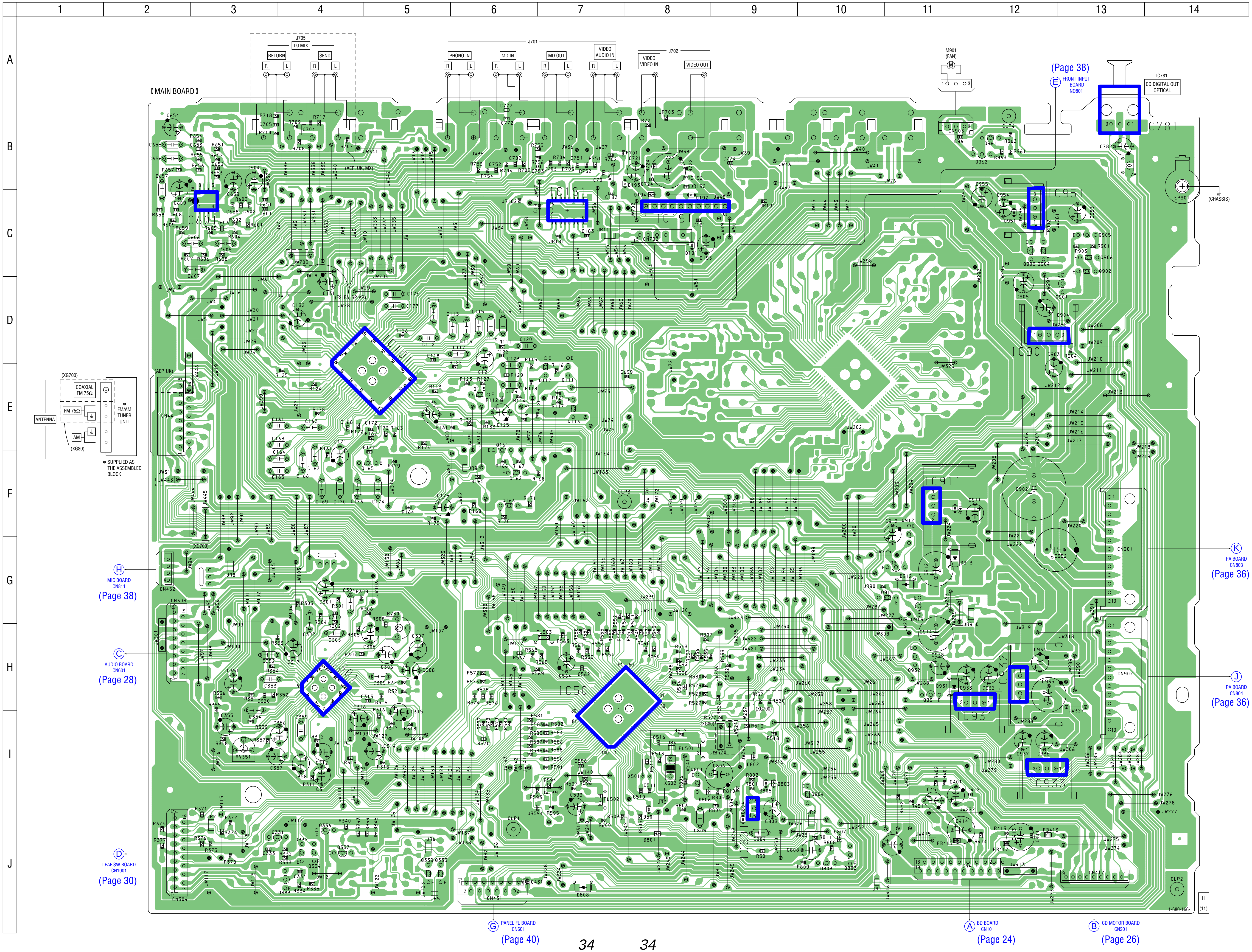
• Voltages and waveforms are dc with respect to ground under no-signal (detuned) conditions.
no mark : TUNER (FM/AM)
( ) : CD PLAY
< > : VIDEO
{ } : TAPE PLAY (DECK A)
[ ] : TAPE PLAY (DECK B)
《 》 : RECORD
* : Impossible to measure

7-16. SCHEMATIC DIAGRAM – MAIN Board (3/3) –



• Voltages and waveforms are dc with respect to ground under no-signal (detuned) conditions.
no mark : TUNER (FM/AM)
( ) : CD PLAY

7-17. PRINTED WIRING BOARD – MAIN Board – • See page 23 for Circuit Boards Location.



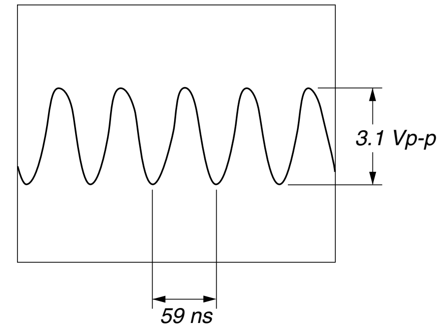
- **Semiconductor Location**

Ref. No.	Location
D191	C-8
D192	C-8
D193	B-8
D194	C-8
D501	J-8
D534	H-8
D801	J-8
D802	I-9
D803	I-9
D804	J-9
D805	I-9
D806	I-8
D807	J-10
D808	J-7
D911	F-11
D912	G-11
D913	G-11
D931	H-11
D951	C-12
IC101	E-5
IC181	C-7
IC191	C-8
IC301	H-4
IC501	H-7
IC601	C-3
IC781	B-13
IC801	J-9
IC901	D-12
IC911	F-11
IC931	H-12
IC932	H-12
IC933	I-12
IC951	C-12
Q111	E-7
Q112	E-7
Q113	E-7
Q115	E-6
Q161	E-6
Q162	F-6
Q163	F-6
Q165	F-5
Q331	J-4
Q332	J-4
Q333	J-4
Q334	J-4
Q335	J-5
Q336	J-4
Q339	J-5
Q801	I-8
Q802	J-10
Q803	J-10
Q804	I-10
Q901	D-13
Q902	C-13
Q903	C-12
Q904	C-12
Q905	C-13
Q906	C-13
Q911	G-11
Q912	F-11
Q913	G-11
Q914	G-11
Q931	H-11
Q932	H-11
Q961	B-12
Q962	B-12

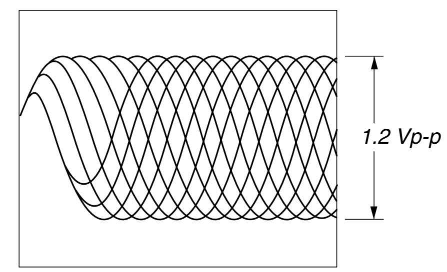
- **Waveforms**

– BD Board –

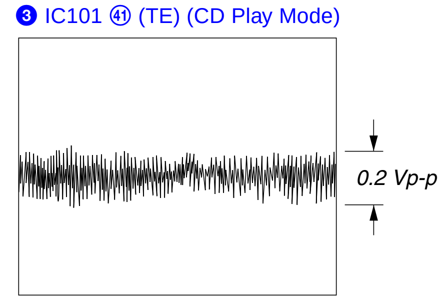
❶ IC101 (67) (XTAO)



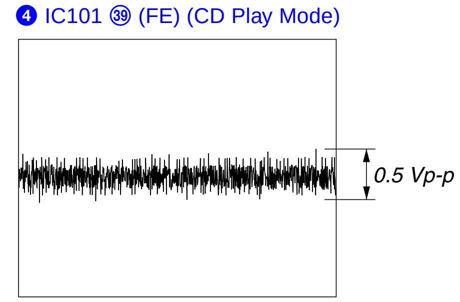
❷ IC101 (51) (RFAC) (CD Play Mode)



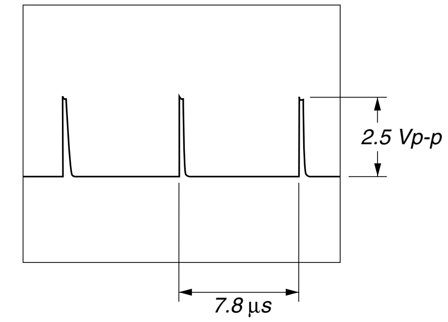
❸ IC101 (41) (TE) (CD Play Mode)



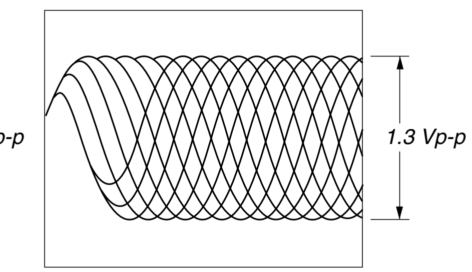
❹ IC101 (39) (FE) (CD Play Mode)



❺ IC101 (26) (MDP) (CD Play Mode)

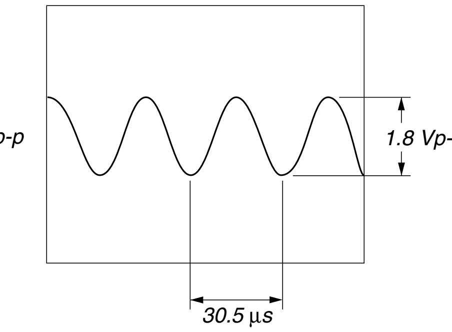


❻ IC103 (16) (RFO) (CD Play Mode)

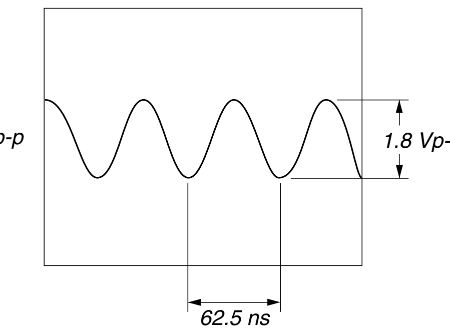


– MAIN Board –

❶ IC501 (10) (XC-IN)

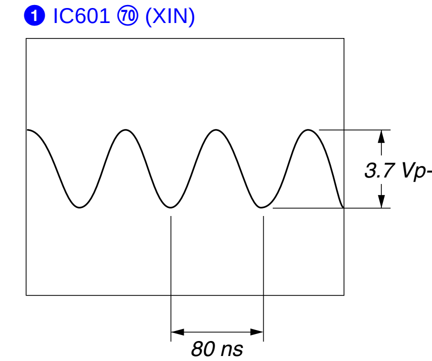


❷ IC501 (15) (X-IN)



– PANEL FL Board –

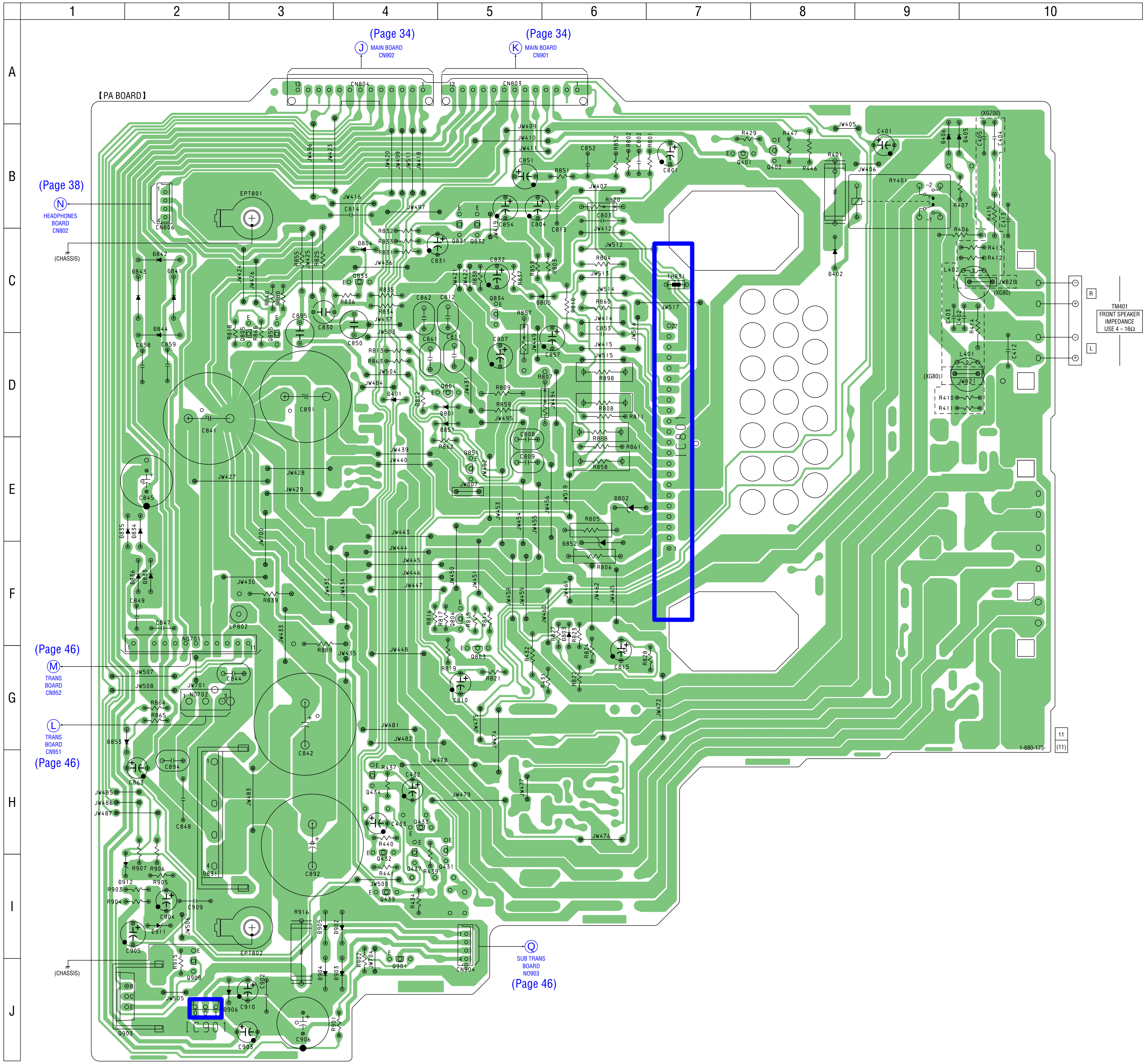
❶ IC601 (70) (XIN)



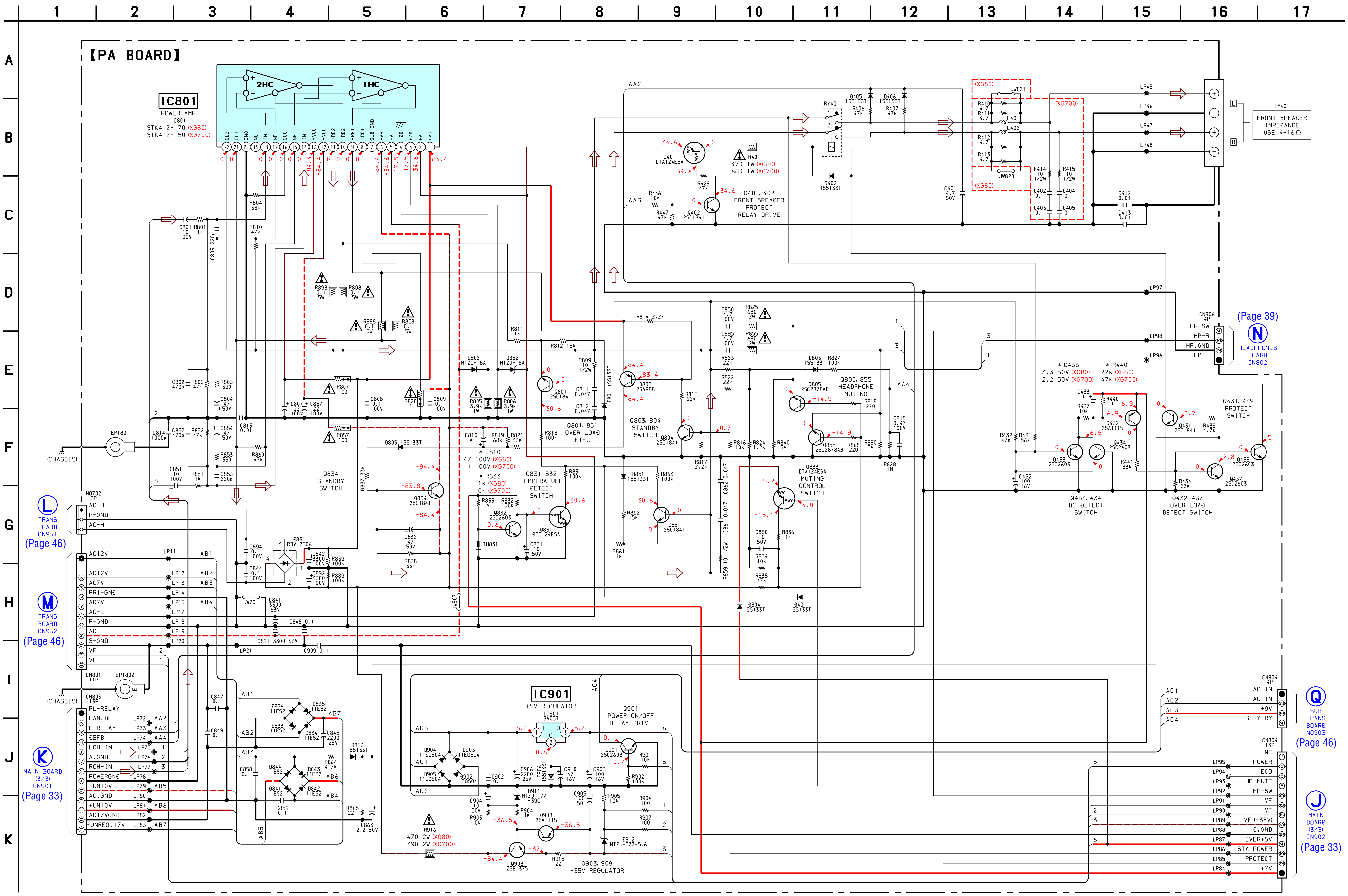
7-18. PRINTED WIRING BOARD – PA Board – • See page 23 for Circuit Boards Location.

• **Semiconductor Location**

Ref. No.	Location
D401	D-4
D402	C-8
D405	B-9
D406	B-9
D801	D-5
D802	E-6
D803	F-6
D804	C-4
D805	C-6
D831	H-2
D833	F-2
D834	E-2
D835	E-2
D836	F-2
D841	C-2
D842	C-2
D843	C-2
D844	D-2
D851	D-5
D852	F-6
D853	G-2
D902	I-4
D903	J-4
D904	J-3
D905	I-3
D906	J-3
D911	I-2
D912	I-2
IC801	D-7
IC901	J-2
Q401	B-7
Q402	B-8
Q431	H-5
Q432	H-4
Q433	H-4
Q434	H-4
Q437	H-4
Q439	I-4
Q801	D-5
Q803	G-5
Q804	F-5
Q805	D-3
Q831	B-5
Q832	B-5
Q833	C-4
Q834	C-5
Q851	E-5
Q855	D-3
Q901	J-4
Q903	J-2
Q908	J-2



7-19. SCHEMATIC DIAGRAM – PA Board –

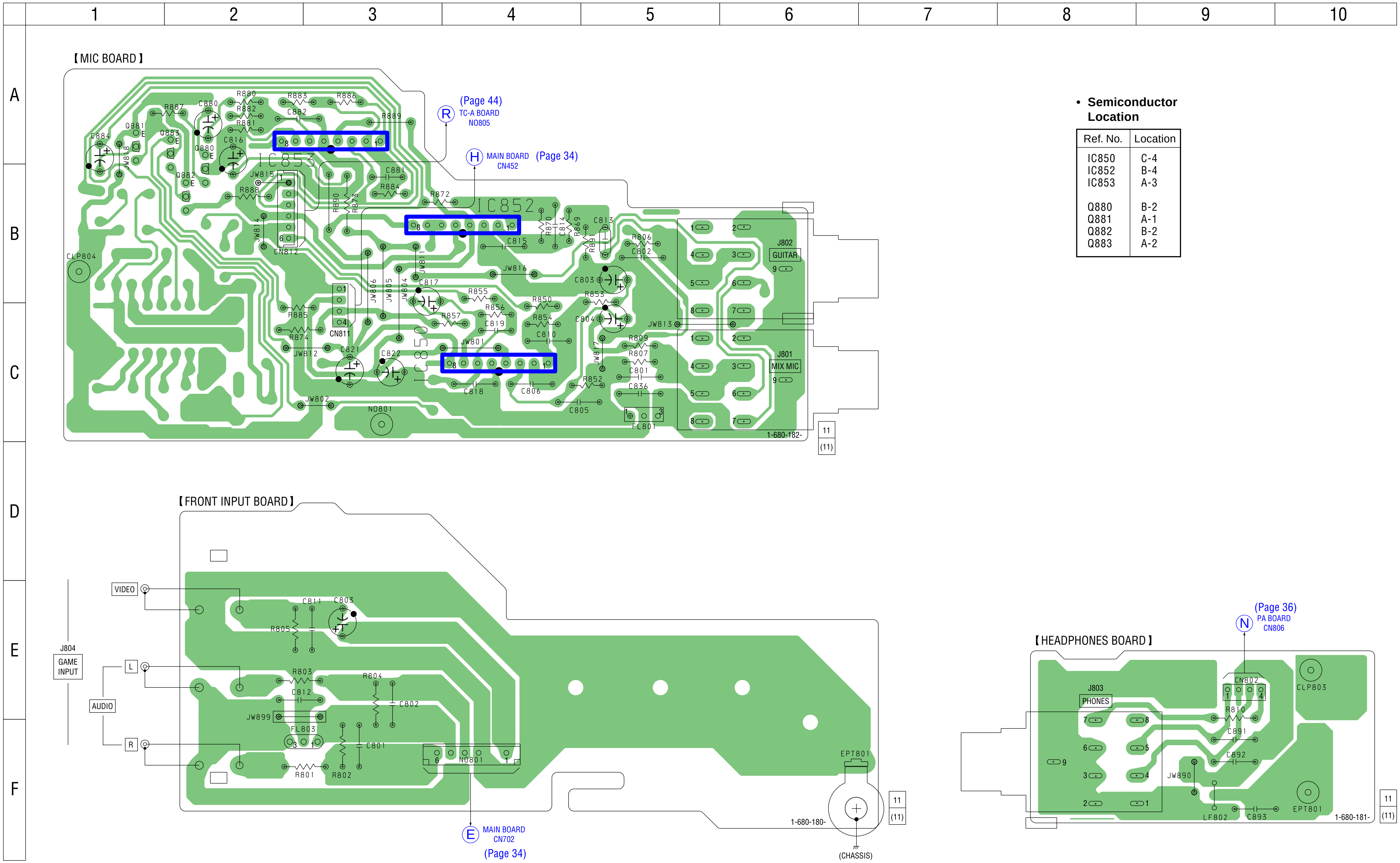


The components identified by mark ⚠ or dotted line with mark ⚠ are critical for safety.
Replace only with part number specified.

• Voltages and waveforms are dc with respect to ground under no-signal (detuned) conditions.
no mark : TUNER (FM/AM)

7-20. PRINTED WIRING BOARDS – MIC/FRONT INPUT/HEADPHONES Boards –

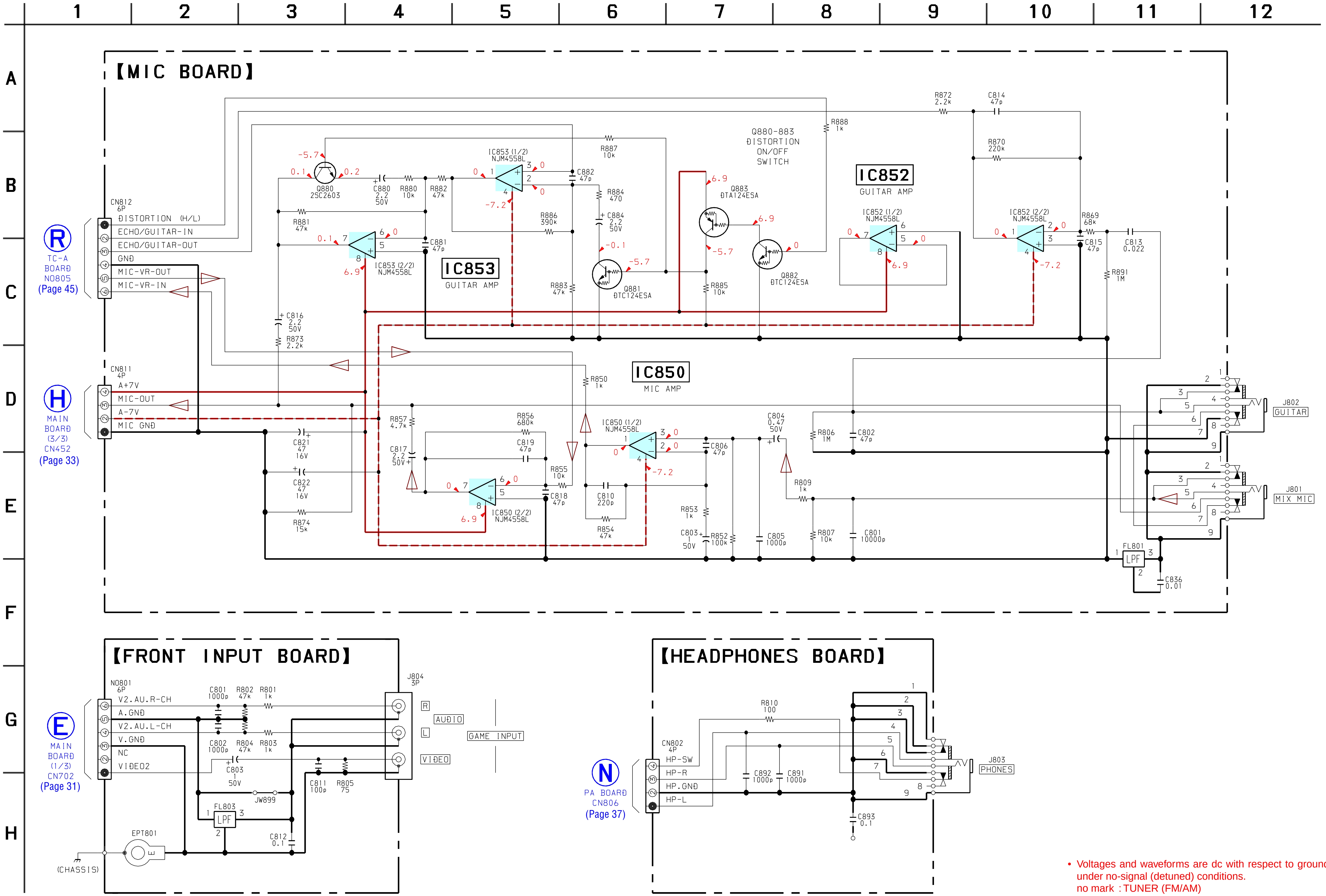
• See page 23 for Circuit Boards Location.



• **Semiconductor Location**

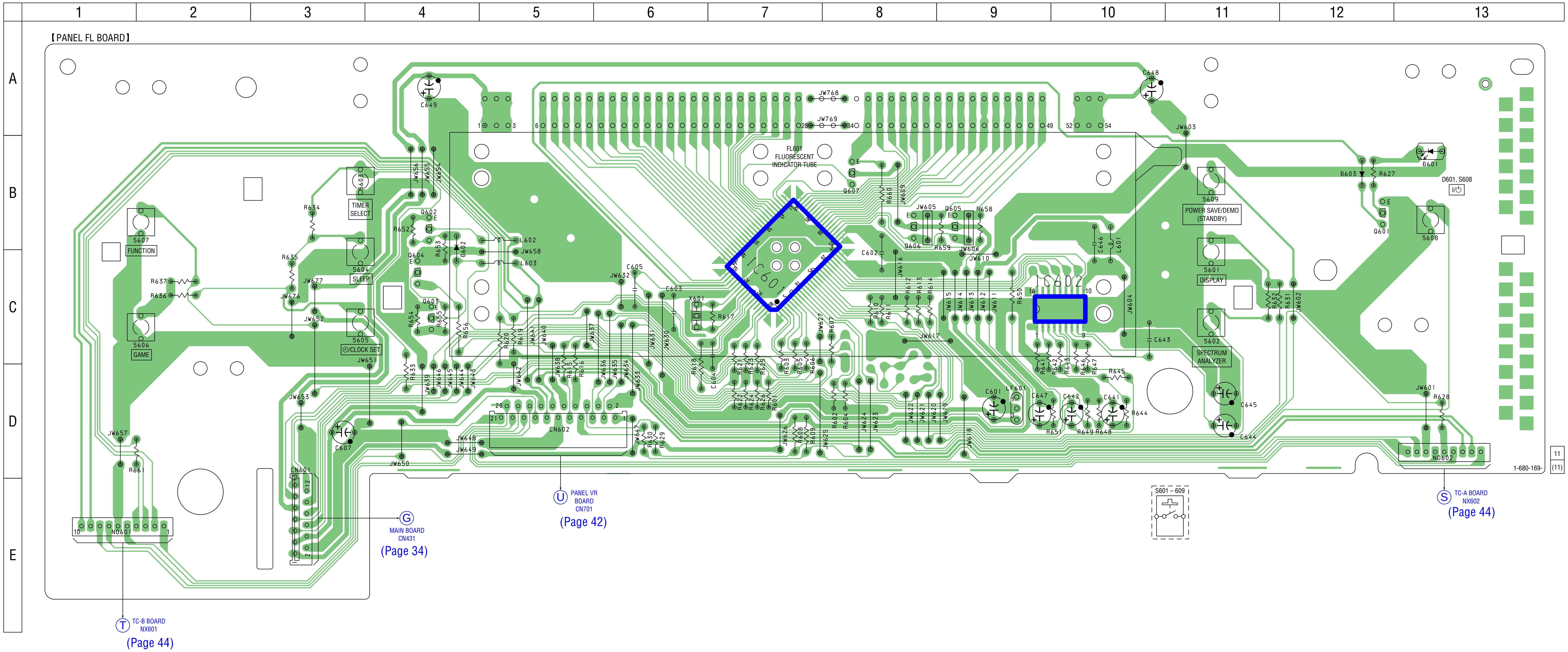
Ref. No.	Location
IC850	C-4
IC852	B-4
IC853	A-3
Q880	B-2
Q881	A-1
Q882	B-2
Q883	A-2

7-21. SCHEMATIC DIAGRAM – MIC/FRONT INPUT/HEADPHONES Boards –



• Voltages and waveforms are dc with respect to ground under no-signal (detuned) conditions.
no mark : TUNER (FM/AM)

7-22. PRINTED WIRING BOARD – PANEL FL Board – • See page 23 for Circuit Boards Location.

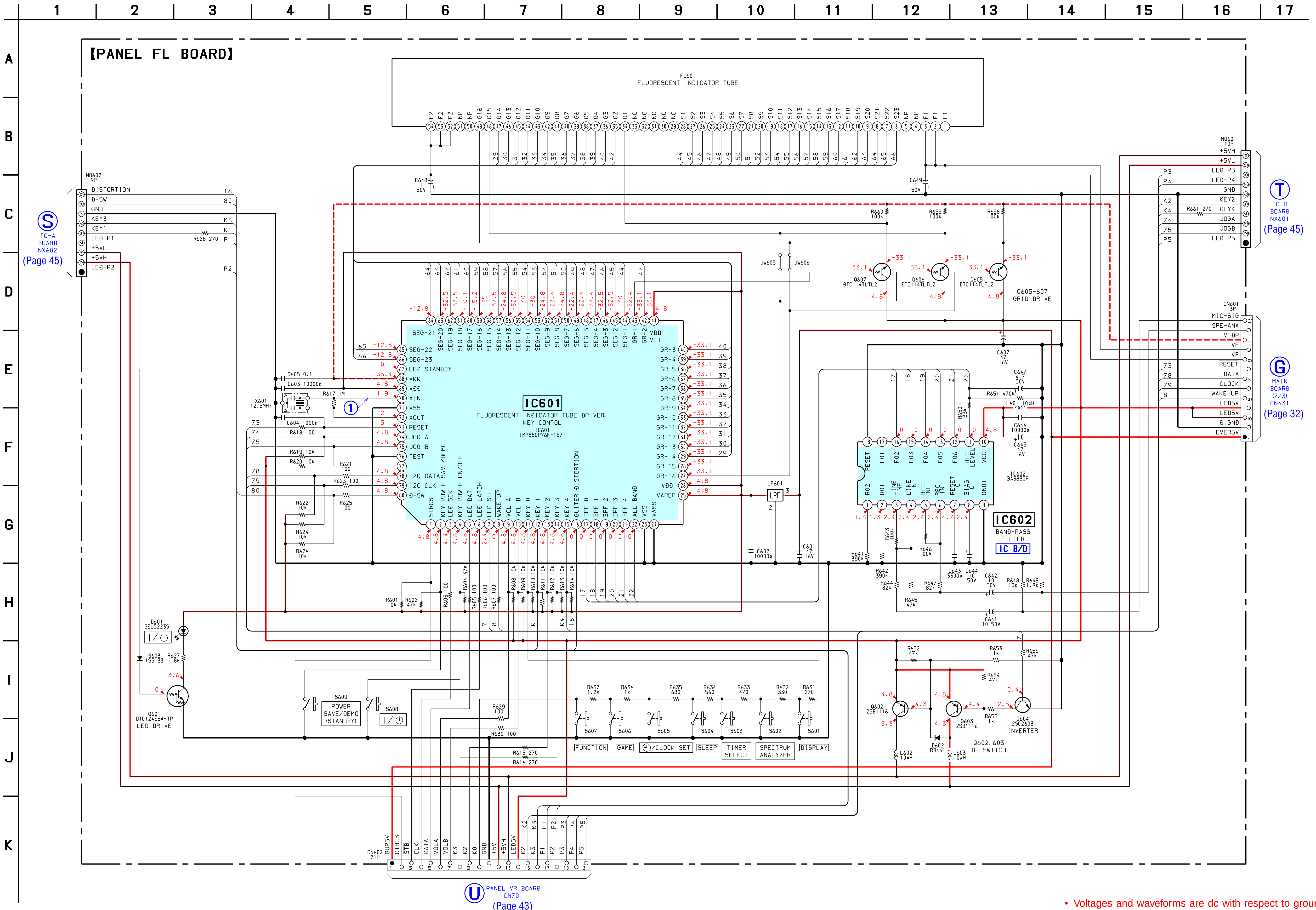


- **Semiconductor Location**

Ref. No.	Location
D601	B-13
D602	B-4
D603	B-12
IC601	C-7
IC602	C-10
Q601	B-12
Q602	B-4
Q603	C-4
Q604	C-4
Q605	B-9
Q606	B-8
Q607	B-8

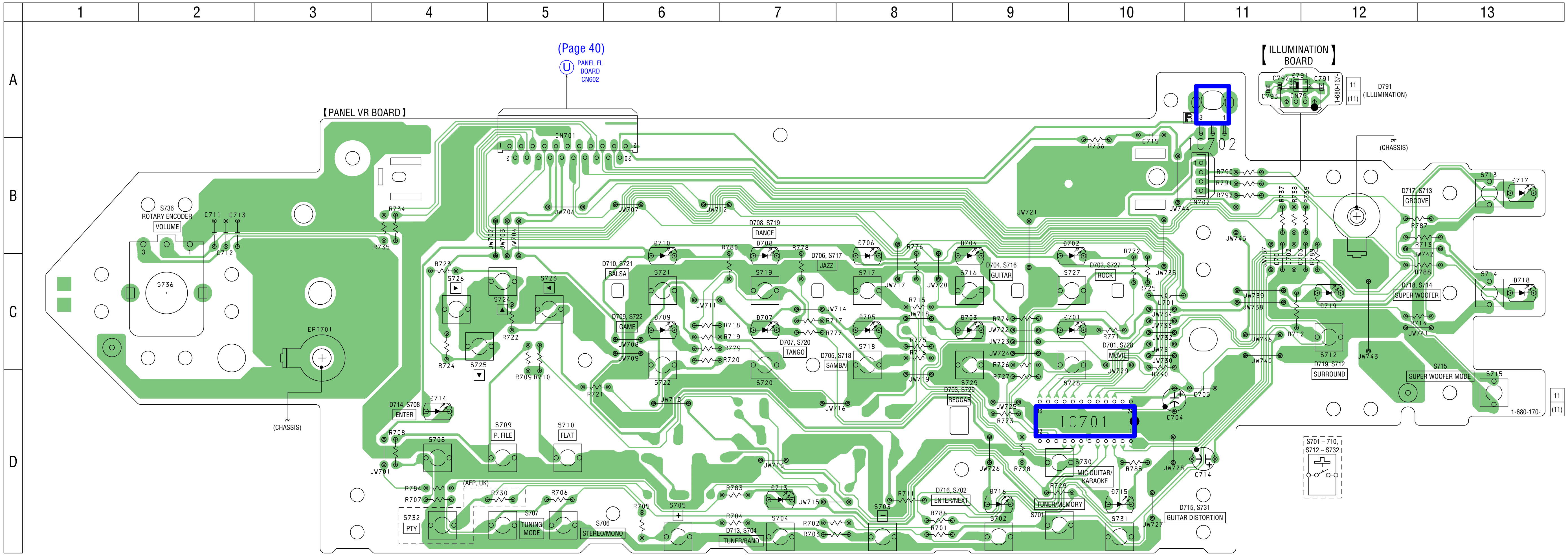
7-23. SCHEMATIC DIAGRAM – PANEL FL Board –

• See page 35 for Waveform. • See page 47 for IC Block Diagram.



• Voltages and waveforms are dc with respect to ground under no-signal (detuned) conditions.
no mark : TUNER (FM/AM)

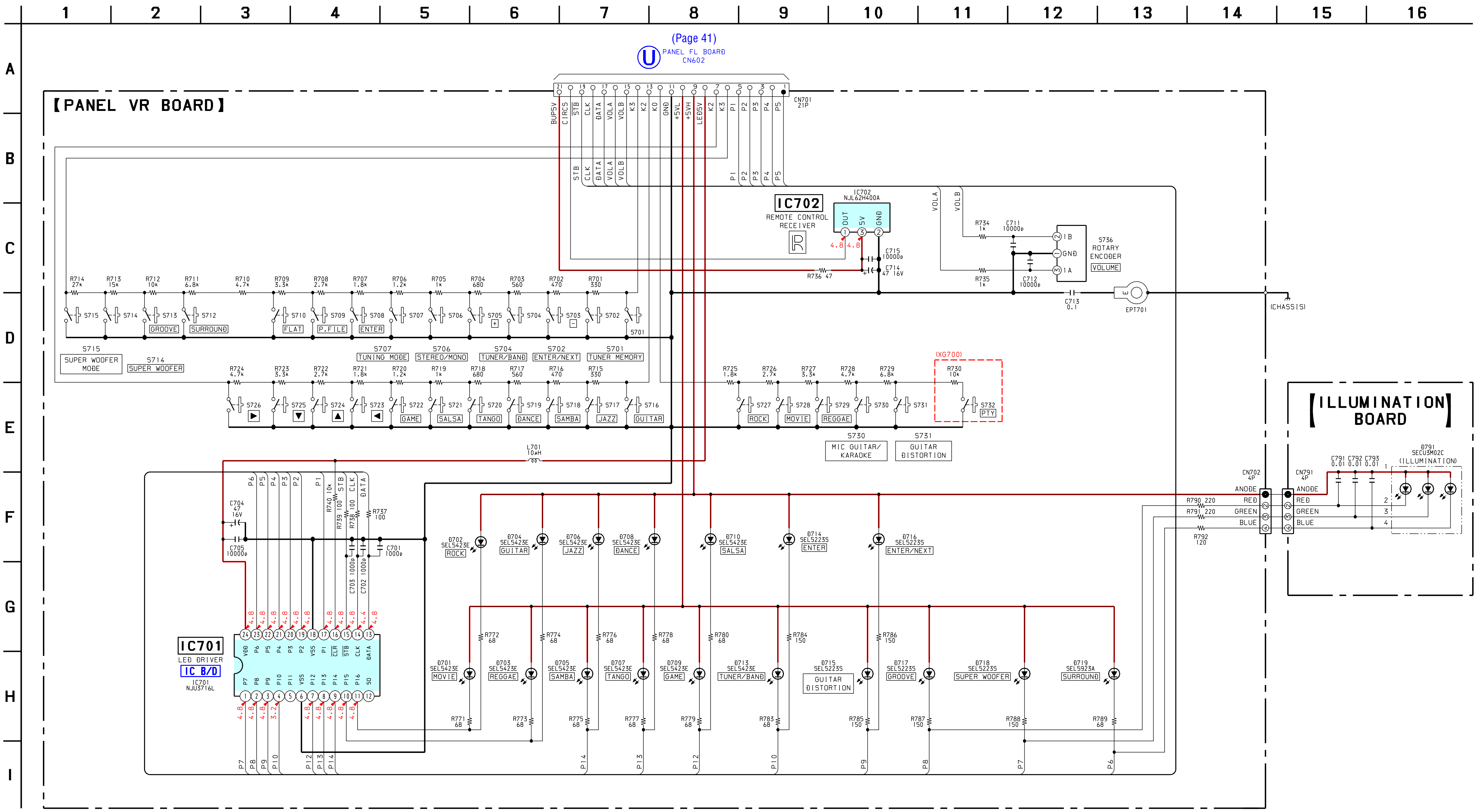
7-24. PRINTED WIRING BOARDS – PANEL VR/ILLUMINATION Boards – • See page 23 for Circuit Boards Location.



• **Semiconductor Location**

Ref. No.	Location
D701	C-10
D702	C-10
D703	C-9
D704	C-9
D705	C-8
D706	C-8
D707	C-7
D708	C-7
D709	C-6
D710	C-6
D713	D-7
D714	D-4
D715	D-10
D716	D-9
D717	B-13
D718	C-13
D719	C-12
D791	A-11
IC701	D-10
IC702	A-11

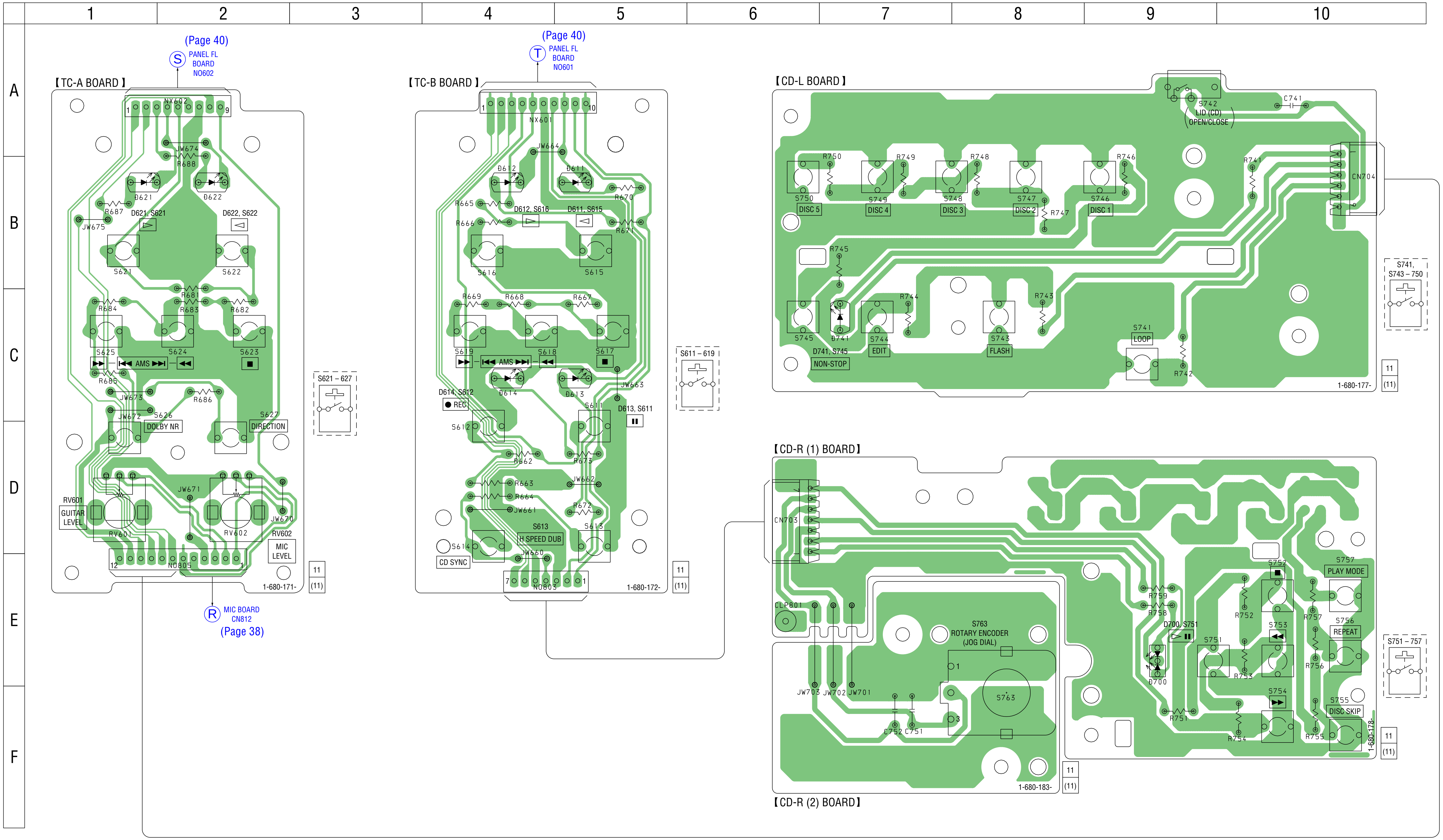
7-25. SCHEMATIC DIAGRAM – PANEL VR/ILLUMINATION Boards – • See page 47 for IC Block Diagram.



• Voltages and waveforms are dc with respect to ground under no-signal (detuned) conditions.
no mark : TUNER (FM/AM)

7-26. PRINTED WIRING BOARDS – TC-A/TC-B/CD-L/CD-R (1)/CD-R (2) Boards –

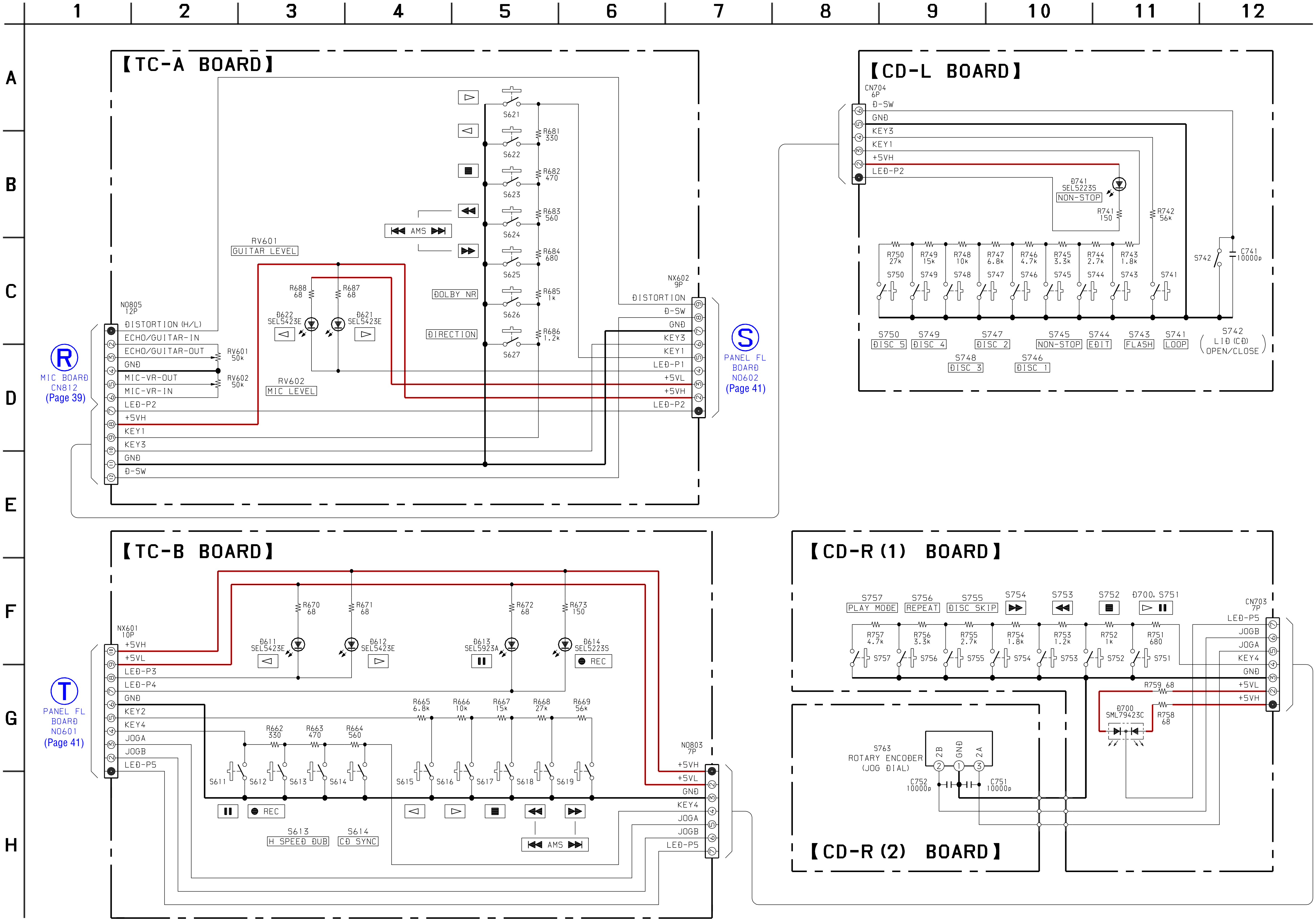
• See page 23 for Circuit Boards Location.



• **Semiconductor Location**

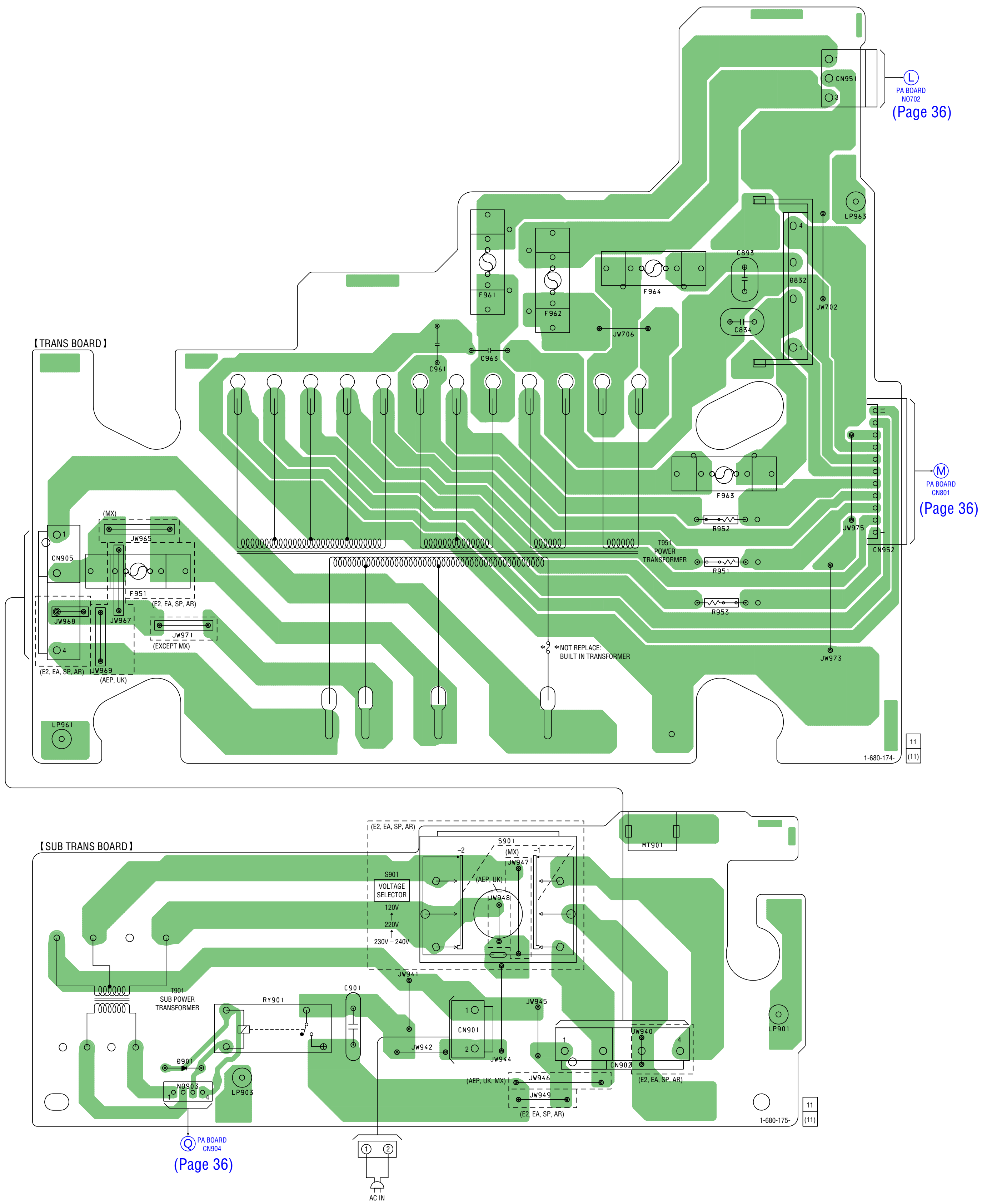
Ref. No.	Location
D611	B-5
D612	B-4
D613	C-5
D614	C-4
D621	B-1
D622	B-2
D700	E-9
D741	C-7

7-27. SCHEMATIC DIAGRAM – TC-A/TC-B/CD-L/CD-R (1)/CD-R (2) Boards –

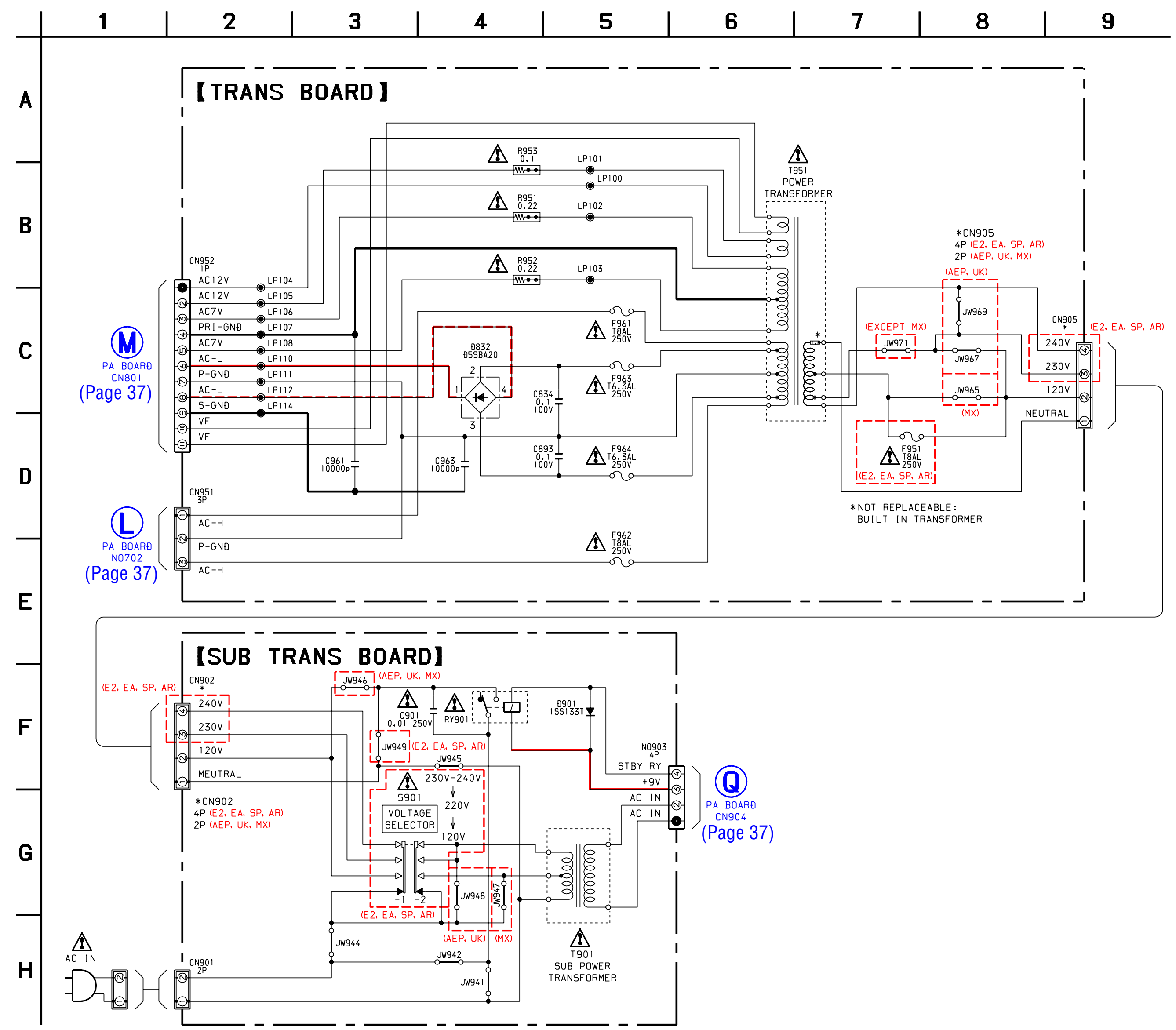


7-28. PRINTED WIRING BOARDS – TRANSFORMER Section–

• See page 23 for Circuit Boards Location.



7-29. SCHEMATIC DIAGRAM – TRANSFORMER Section –

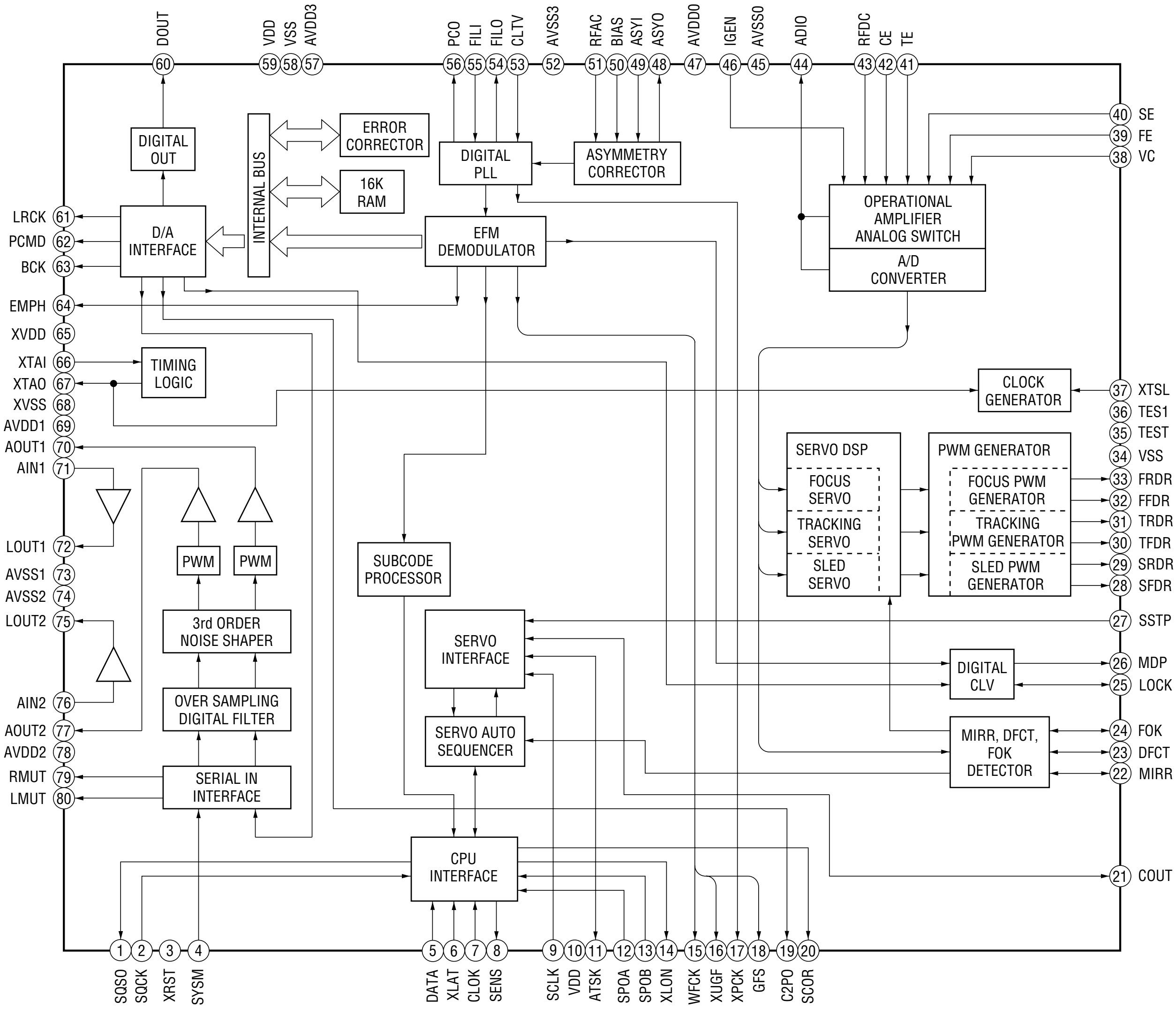


The components identified by mark ⚠ or dotted line with mark ⚠ are critical for safety.
Replace only with part number specified.

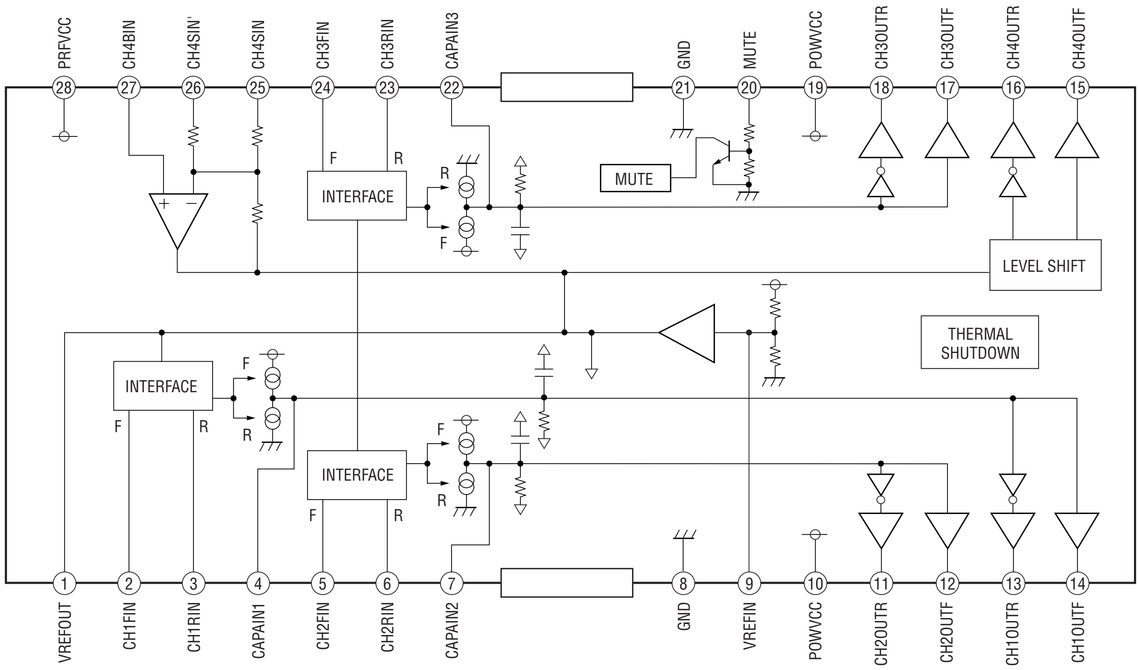
- **IC Block Diagrams**

– BD Board –

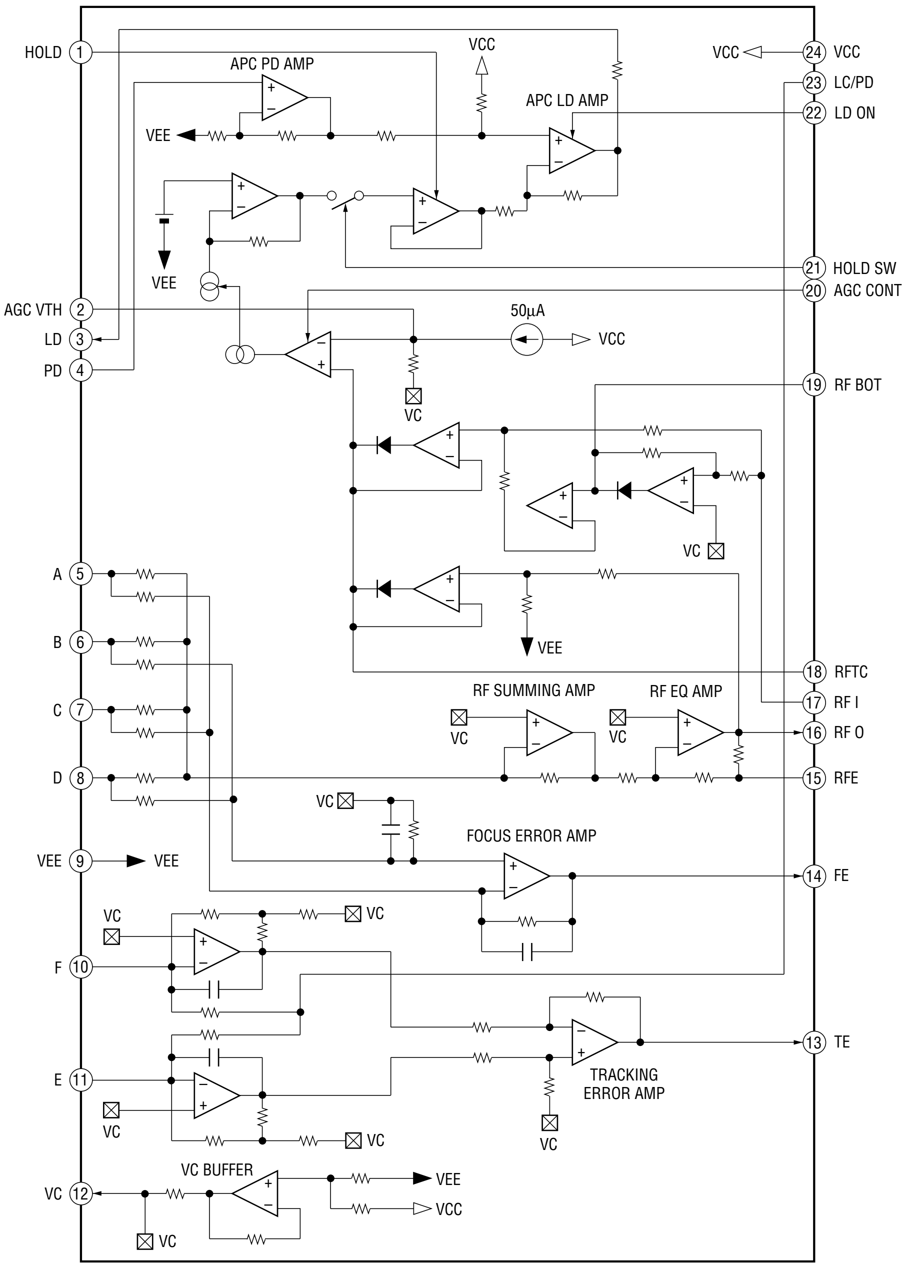
IC101 CXD2587Q



IC102 BA5974FP-E2

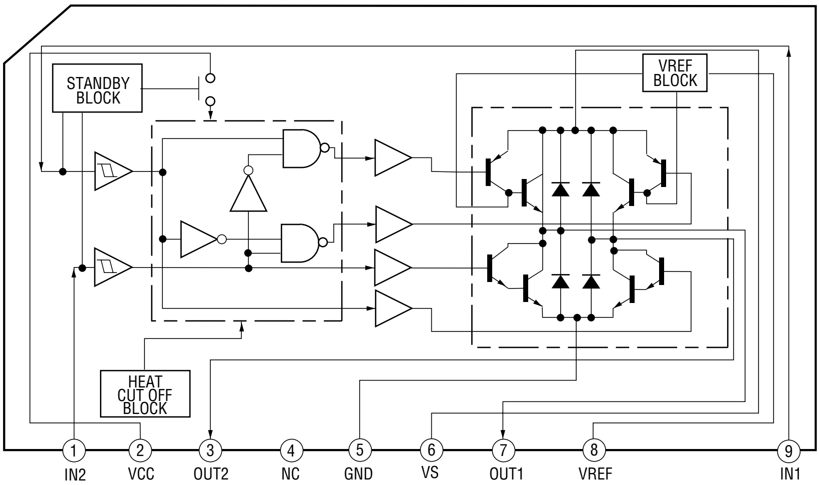


IC103 CXA2568M-T6



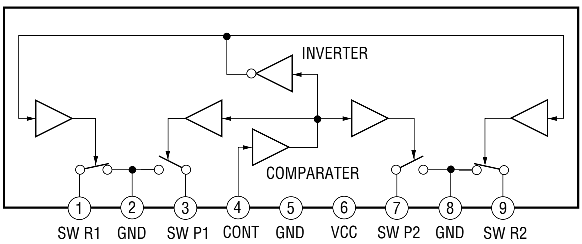
– CD MOTOR Board –

IC201 TA8409S



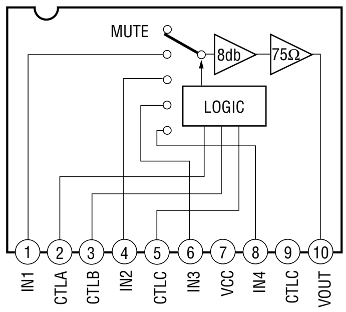
– AUDIO Board –

IC602 µPC1330HA



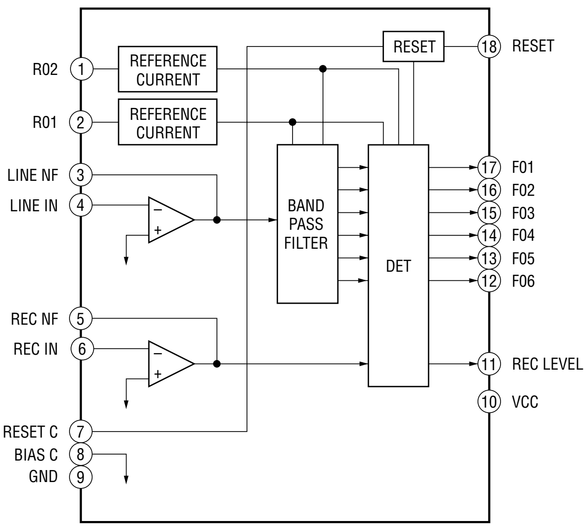
– MAIN Board –

IC191 BA7615N



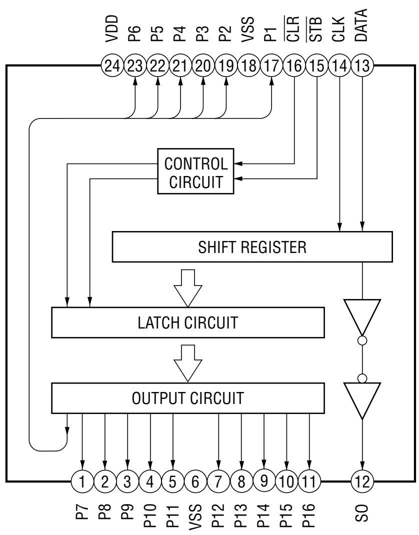
– PANEL FL Board –

IC602 BA3830F



– PANEL VR Board –

IC701 NJU3716L



7-30. IC PIN FUNCTION DESCRIPTION

• MAIN BOARD IC501 M30622MAA-A92FP (SYSTEM CONTROLLER (CD MECHANISM CONTROL))

Pin No.	Pin Name	I/O	Description
1	STK-POWER	O	Power amplifier on/off selection signal output "L": standby mode, "H": power amplifier on
2	POWER	O	Power on/off control signal output for the audio system (+5V) and deck, panel, audio system (+7V) and FM/AM tuner unit (+10V) "L": standby mode, "H": power on
3	F-RELAY	O	Relay drive signal output for the front speaker protect "H": relay on
4	REAR-RELAY	O	Relay drive signal output for the rear speaker protect "H": relay on Not used (open)
5	CD-POWER	O	Power on/off control signal output for the CD mechanism deck section "L": standby mode, "H": power on
6	$\overline{\text{LINE-MUTE}}$	O	Line muting on/off control signal output "L": muting on, "H": muting off
7	DBFB-$\overline{\text{H}}$/L	O	DBFB normal/high selection signal output to the M62493FP (IC101) "L": DBFB high, "H": DBFB low (normal)
8, 9	—	—	Connect to ground
10	XC-IN	I	Sub system clock input terminal (32.768 kHz)
11	XC-OUT	O	Sub system clock output terminal (32.768 kHz)
12	$\overline{\text{RESET}}$	I	System reset signal input from the reset signal generator (IC801) "L": reset For several hundreds msec. after the power supply rises, "L" is input, then it changes to "H"
13	X-OUT	O	Main system clock output terminal (16 MHz)
14	VSS	—	Ground terminal
15	X-IN	I	Main system clock input terminal (16 MHz)
16	VDD	—	Power supply terminal (+5V)
17	NMI	I	Non-maskable interrupt input terminal Fixed at "H" in this set
18	$\overline{\text{WAKE UP}}$	I	Wakeup control signal input from the fluorescent indicator tube driver (IC601) "L" active
19	SCOR	I	Subcode sync (S0+S1) detection signal input from the CXD2587Q (IC101)
20	RDS-INT	I	Serial data transfer clock signal input from the RDS decoder on the FM/AM tuner unit (Used for the HCD-XG700)
21	RDS-DATA	I	Serial data input from the RDS decoder on the FM/AM tuner unit (Used for the HCD-XG700)
22	$\overline{\text{AC-CUT}}$	I	AC off detection signal input from the reset signal generator (IC801) "L": AC cut checked
23	PL-CLK	O	Serial data transfer clock signal output to the pro-logic circuit Not used (open)
24	PL-DATA	O	Serial data output to the pro-logic circuit Not used (open)
25	PL-LAT	O	Serial data latch pulse output to the pro-logic circuit Not used (open)
26	TIMER LED	O	LED drive signal output terminal Not used (open)
27	$\overline{\text{PROTECT}}$	I	Protect on/off detection signal input from the speaker protect circuit "L": protect on, "H": protect off
28	V MUTE	O	Video muting on/off control signal output to the BA7615N (IC191) "L": muting off, "H": muting on
29	IIC-CLK	I/O	Communication data reading clock signal input or transfer clock signal output with the fluorescent indicator tube driver (IC601)
30	IIC-DATA	I/O	Communication data bus with the fluorescent indicator tube driver (IC601)
31	NO-USE	O	Not used (open)
32	SQ-DATA	I	Subcode Q data input from the CXD2587Q (IC101)
33	SQ-CLK	I	Subcode Q data reading clock signal output to the CXD2587Q (IC101)
34	SW-MODE	O	Music/movie mode selection signal output to the M62493FP (IC101) "L": movie mode , "H": music mode
35	CD-DATA	O	Serial data output to the CXD2587Q (IC101)
36	H/P IN	I	Connection detection signal input of the headphone jack (J803) "L": no connected, "H": headphone connected
37	CD-CLK	O	Serial data transfer clock signal output to the CXD2587Q (IC101)
38	493-LAT	O	Serial data latch pulse output to the M62493FP (IC101)

Pin No.	Pin Name	I/O	Description
39	CLOCK-OUT	O	Not used (open)
40, 41	NO-USE	O	Not used (open)
42	$\overline{\text{FL OFF}}$	O	Filament on/off selection signal output for the fluorescent indicator tube (FL601) “L”: filament off, “H”: filament on Not used in this set
43	STBY RELAY	O	Main power on/off control signal output “L”: standby mode, “H”: power on
44	BASS FREQ	O	Sync bass frequency normal/high selection signal output terminal “L”: sync bass off (normal), “H”: sync bass high Not used (open)
45	FUNC SEL1	O	Function selection signal output to the BA7615N (IC191)
46	FUNC SEL0	O	Function selection signal output to the BA7615N (IC191)
47	493-DATA	O	Serial data output to the M62493FP (IC101)
48	493-CLK	O	Serial data transfer clock signal output to the M62493FP (IC101)
49	ST-MUTE	O	Tuner muting on/off control signal output to the FM/AM tuner unit “L”: muting off, “H”: muting on
50	STEREO	I	FM stereo detection signal input from the FM/AM tuner unit “L”: stereo
51	TUNED	I	Tuning detection signal input from the FM/AM tuner unit “L”: tuned
52	ST-CE	O	PLL chip enable signal output to the FM/AM tuner unit
53	ST-DOUT	O	PLL serial data output to the FM/AM tuner unit
54	ST-DIN	I	PLL serial data input from the FM/AM tuner unit
55	ST-CLK	O	PLL serial data transfer clock signal output to the FM/AM tuner unit
56	SENS	I	Internal status detection monitor input from the CXD2587Q (IC101)
57	HOLD	O	Laser power control signal output to the CXA2568M (IC103)
58	XLT	O	Serial data latch pulse output to the CXD2587Q (IC101)
59	XRST	O	Reset signal output to the CXD2587Q (IC101) and BA5974FP (IC102) “L”: reset
60	DISC-SENS	I	Disc status detection signal input terminal Not used (fixed at “L”)
61	T-SENS	I	Disc table status detection signal input from the disc table sensor (IC202)
62	VDD	—	Power supply terminal (+5V)
63	TBL-L	O	Motor drive signal output to the table motor driver (IC201) “L” active *1
64	VSS	—	Ground terminal
65	TBL-R	O	Motor drive signal output to the table motor driver (IC201) “L” active *1
66	LOAD-OUT	O	Loading motor drive signal output terminal Not used (open)
67	LOAD-IN	O	Loading motor drive signal output terminal Not used (open)
68	ENC3/UP-SW	I	Detection signal input from the up switch (S201)
69	ENC2/DISC-LED	O	LED drive signal output of the DISC No. indicator (D201) “H”: LED on
70	ENC1	I	Disc tray address detection signal input terminal Not used (fixed at “L”)
71	OUT-OPEN	I	Disc tray open/close detection signal input terminal Not used (fixed at “L”)
72	B-TRG	O	Deck-B side trigger plunger drive signal output “H”: plunger on
73	A-TRG	O	Deck-A side trigger plunger drive signal output “H”: plunger on
74	CAPM-CNT2	O	Capstan motor (M1) drive signal output “L”: reverse direction, “H”: forward direction
75	CAPM-CNT1	O	Capstan motor drive signal output terminal Not used (open)
76	CAP-M-H/L	O	High/normal speed selection signal output of the capstan motor (M1) “L”: normal speed, “H”: high speed
77	AMS-IN	I	Whether a music is present or not from HA12215F (IC301) is detected at automatic music sensor “L”: music is present, “H”: music is not present

*1 Table motor (M201) control

Mode / Terminal	Stop	Counter-clockwise	Clockwise	Brake
TBL-L (pin ⑥③)	“H”	“L”	“H”	“L”
TBL-R (pin ⑥⑤)	“H”	“H”	“L”	“L”

Pin No.	Pin Name	I/O	Description
78	TC-MUTE	O	Line muting on/off selection signal output to the HA12215F (IC301) “L”: muting off, “H”: muting on
79	R/PB/PAS	O	Recording/playback/pass selection signal output to the HA12215F (IC301) “L”: recording mode, “H”: pass, “Hi-z”: playback mode
80	NR-ON/$\overline{\text{OFF}}$	O	Dolby NR on/off selection signal output to the HA12215F (IC301) “L”: dolby off, “H”: dolby on
81	$\overline{\text{REC-MUTE}}$	O	Recording muting on/off selection signal output to the HA12215F (IC301) “L”: muting on, “H”: muting off
82	BIAS	O	Recording bias on/off selection signal output to the HA12215F (IC301) “L”: bias off, “H”: bias on
83	EQ-H/$\overline{\text{N}}$	O	Normal/high speed selection signal output to the HA12215F (IC301) “L”: normal speed, “H”: high speed
84	PB-$\overline{\text{A}}$/B	O	Deck-A/B selection signal output to the HA12215F (IC301) “L”: deck-A, “H”: deck-B
85	ALC	O	Automatic limiter control signal output to the HA12215F (IC301) “L”: limiter on
86	B-PLAY-SW	I	Detection signal input from the deck- B play detect switch (S1002) “H”: deck-B play
87	A-PLAY-SW	I	Detection signal input from the deck- A play detect switch (S1001) “H”: deck-A play
88	A-HALF	I	Detection signal input from the deck-A cassette detect switch (S1003) “L”: no cassette, “H”: cassette in
89	B-HALF	I	Detection signal input from the deck-B half detect switch (S1006)
90	B-SHUT	I	Shut off detection signal input from the deck-B side reel pulse detector (IC1002)
91	A-SHUT	I	Shut off detection signal input from the deck-A side reel pulse detector (IC1001)
92	SOFT-TEST	O	Output terminal for the software test (open)
93	$\overline{\text{HP MUTE}}$	O	Headphone muting control signal output “L”: muting on, “H”: muting off
94	KEY/CD-ADJ	I	Setting terminal for the CD adjustment mode Not used (fixed at “L”)
95	MODEL-IN	I	Model setting terminal
96	AVSS	—	Ground terminal (for A/D conversion)
97	SPEC-IN	I	Destination setting terminal
98	VREF	I	Reference voltage (+5V) input terminal
99	AVCC	—	Power supply terminal (+5V) (for A/D conversion)
100	TC-RELAY	O	Recording/playback selection signal output to the REC/PB switch (IC602) “L”: playback, “H”: recording

• PANEL FL BOARD IC601 TMP88CP76F-1B71 (FLUORESCENT INDICATOR TUBE DRIVER, KEY CONTROL)

Pin No.	Pin Name	I/O	Description
1	SIRCS	I	Remote control signal input from the remote control receiver (IC702)
2	KEY POWER SAVE/DEMO	I	Power save/demonstration switch (S609 POWER SAVE/DEMO (STANDBY)) input terminal “L” is input when key pressing
3	LED SCK	O	Serial data transfer clock signal output to the LED driver (IC701)
4	KEY POWER ON/OFF	I	Power on/off switch (S608 I/⏻) input terminal “L” is input when key pressing
5	LED DAT	O	Serial data output to the LED driver (IC701)
6	LED LATCH	O	Serial data latch pulse signal output to the LED driver (IC701)
7	LED SEL	O	LED selection signal output
8	$\overline{\text{WAKE UP}}$	O	Wakeup control signal output to the system controller (IC501) “L” active
9	VOL A	I	Jog dial pulse input from the rotary encoder (S736 VOLUME) (A phase input)
10	VOL B	I	Jog dial pulse input from the rotary encoder (S736 VOLUME) (B phase input)
11	KEY 0	I	Key input terminal (A/D input) S601 to S607, S727 to S732 (DISPLAY, SPECTRUM ANALYZER, TIMER SELECT, SLEEP, ◴/CLOCK SET, GAME, FUNCTION, ROCK, MOVIE, REGGAE, MIC GUITAR/KARAOKE, GUITAR DISTORTION, PTY) keys input (S732 PTY key: used for the HCD-XG700)
12	KEY 1	I	Key input terminal (A/D input) S621 to S627, S743 to S750 (▷, ◁, ■, ⏮ AMS ⏭ ◀◀/▶▶, DOLBY NR, DIRECTION, FLASH, EDIT, NON-STOP, DISC1/2/3/4/5) keys input
13	KEY 2	I	Key input terminal (A/D input) S615 to S619, S716 to S726 (◁, ▷, ■, ⏮ AMS ⏭ ◀◀/▶▶, GUITAR, JAZZ, SAMBA, DANCE, TANGO, SALSA, GAME, ◀, ▲, ▼, ▶) keys input
14	KEY 3	I	Key input terminal (A/D input) S701 to S710, S712 to S715, S741 (TUNER MEMORY, ENTER/TEXT, –, TUNER/BAND, +, STEREO/MONO, TUNING MODE, ENTER, P.FILE, FLAT, SURROUND, GROOVE, SUPER WOOFER, SUPER WOOFER MODE, LOOP) keys input
15	KEY 4	I	Key input terminal (A/D input) S611 to S614, S751 to S757 (❚❚, ● REC, H SPEED DUB, CD SYNC, ▷❚❚, ■, ◀◀, ▶▶, DISC SKIP, REPEAT, PLAY MODE) keys input
16	GUITAR DISTORTION	O	Distortion on/off control signal output
17	BPF 0	I	Spectrum analyzer drive (super low frequency) signal input from the spectrum analyzer band-pass filter (IC602) (for 40 Hz)
18	BPF 1	I	Spectrum analyzer drive (low frequency) signal input from the spectrum analyzer band-pass filter (IC602) (for 100 Hz)
19	BPF 2	I	Spectrum analyzer drive (low and middle frequency) signal input from the spectrum analyzer band-pass filter (IC602) (for 400 Hz)
20	BPF 3	I	Spectrum analyzer drive (middle and high frequency) signal input from the spectrum analyzer band-pass filter (IC602) (for 2 kHz)
21	BPF 4	I	Spectrum analyzer drive (high frequency) signal input from the spectrum analyzer band-pass filter (IC602) (for 6 kHz)
22	ALL BAND	I	Spectrum analyzer drive signal input from the spectrum analyzer band-pass filter (IC602) (for VACS, non-stop signal)
23	VSS	—	Ground terminal
24	VASS	—	Ground terminal (for A/D conversion)
25	VAREF	I	Reference voltage (+5V) input terminal (for A/D conversion)
26	VDD	—	Power supply terminal (+5V)
27, 28	GR-16, GR-15	O	Grid drive signal output to the fluorescent indicator tube (FL601)
29 to 40	GR-14 to GR-3	O	Grid drive signal output to the fluorescent indicator tube (FL601)
41	VDD VFT	—	Power supply terminal (+5V)
42	GR-2	O	Grid drive signal output to the fluorescent indicator tube (FL601)
43	GR-1	O	Grid drive signal output to the fluorescent indicator tube (FL601)

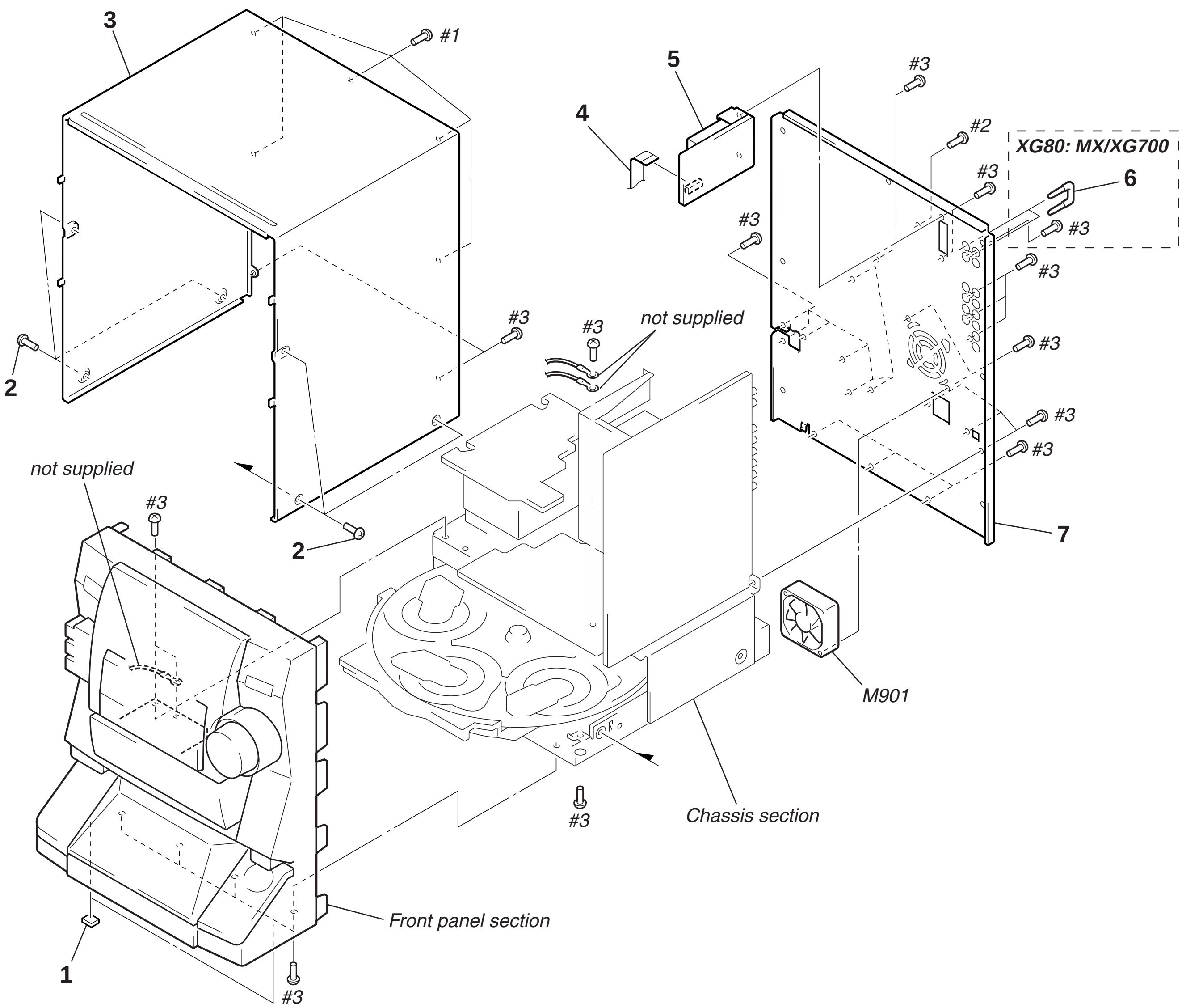
Pin No.	Pin Name	I/O	Description
44 to 66	SEG-1 to SEG-23	O	Segment drive signal output to the fluorescent indicator tube (FL601)
67	LED STANDBY	O	LED drive signal output of the I/⏻ indicator (D601) "H": LED on
68	VKK	—	Power supply terminal (–35V) (for fluorescent indicator tube drive)
69	VDD	—	Power supply terminal (+5V)
70	XIN	I	System clock input terminal (12.5 MHz)
71	VSS	—	Ground terminal
72	XOUT	O	System clock output terminal (12.5 MHz)
73	$\overline{\text{RESET}}$	I	System reset signal input from the reset signal generator (IC801) "L": reset For several hundreds msec. after the power supply rises, "L" is input, then it changes to "H"
74	JOG A	I	Jog dial pulse input from the rotary encoder (S763 JOG DIAL) (A phase input)
75	JOG B	I	Jog dial pulse input from the rotary encoder (S763 JOG DIAL) (B phase input)
76	TEST	I	Connected to ground
77	—	—	Not used (open)
78	I2C DATA	I/O	Communication data bus with the system controller (IC501)
79	I2C CLK	I/O	Communication data reading clock signal input or transfer clock signal output with the system controller (IC501)
80	D-SW	I	CD door open/close detection switch (S742) input terminal "L": close, "H": open

SECTION 8
EXPLODED VIEWS

NOTE:
- -XX and -X mean standardized parts, so they may have some difference from the original one.
- Color Indication of Appearance Parts
  Example:
  KNOB, BALANCE (WHITE) . . . (RED)
  ↑ ↑
  Parts Color Cabinet's Color
- Abbreviation
  AR : Argentina model
  E2 : 120 V AC area in E model
  EA : Saudi Arabia model
  MX : Mexican model
  SP : Singapore model
- Items marked "*" are not stocked since they are seldom required for routine service. Some delay should be anticipated when ordering these items.
- The mechanical parts with no reference number in the exploded views are not supplied.
- Hardware (# mark) list and accessories and packing materials are given in the last of the electrical parts list.

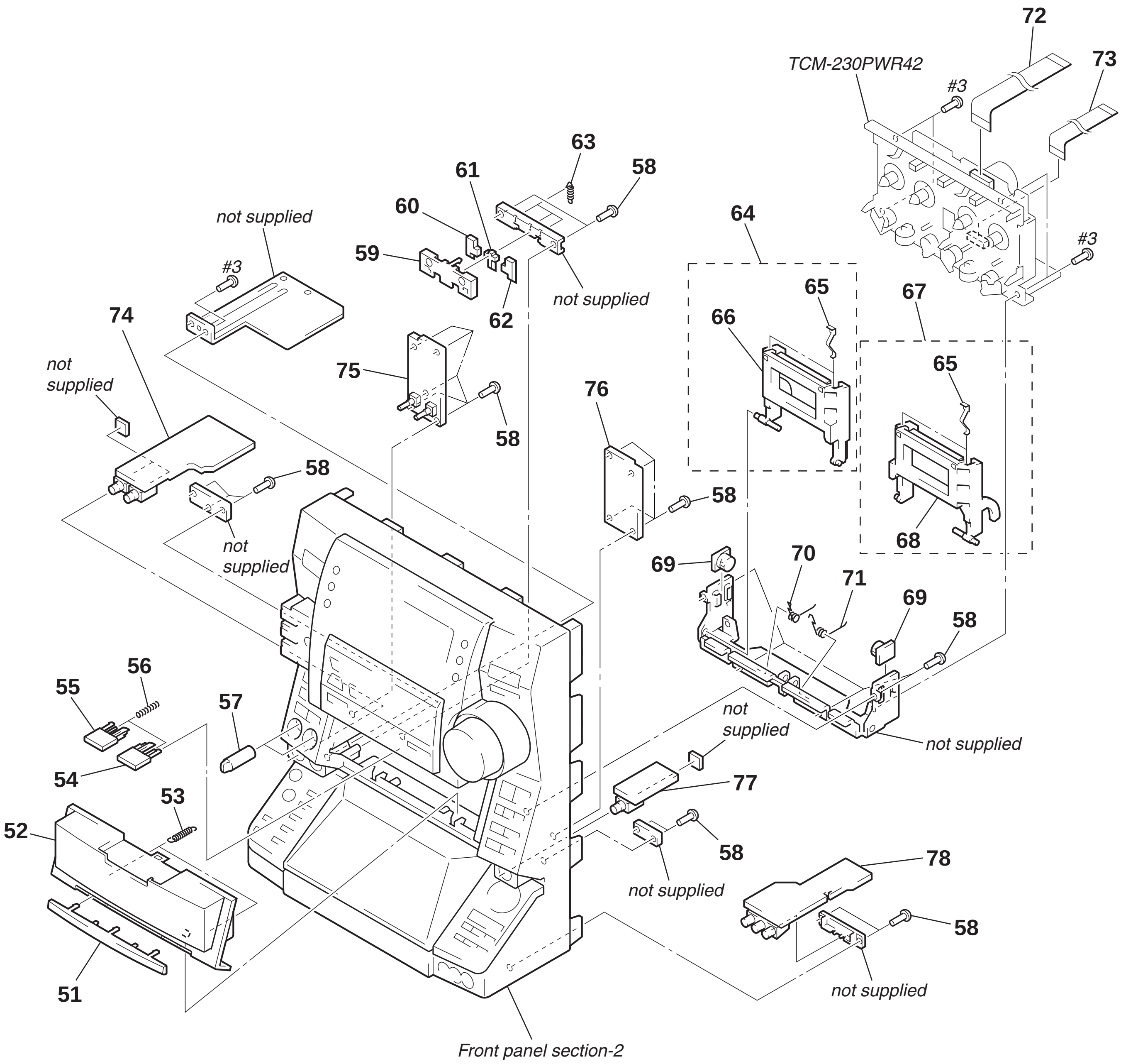
The components identified by mark ⚠ or dotted line with mark ⚠ are critical for safety.
Replace only with part number specified.

8-1. CASE, BACK PANEL SECTION



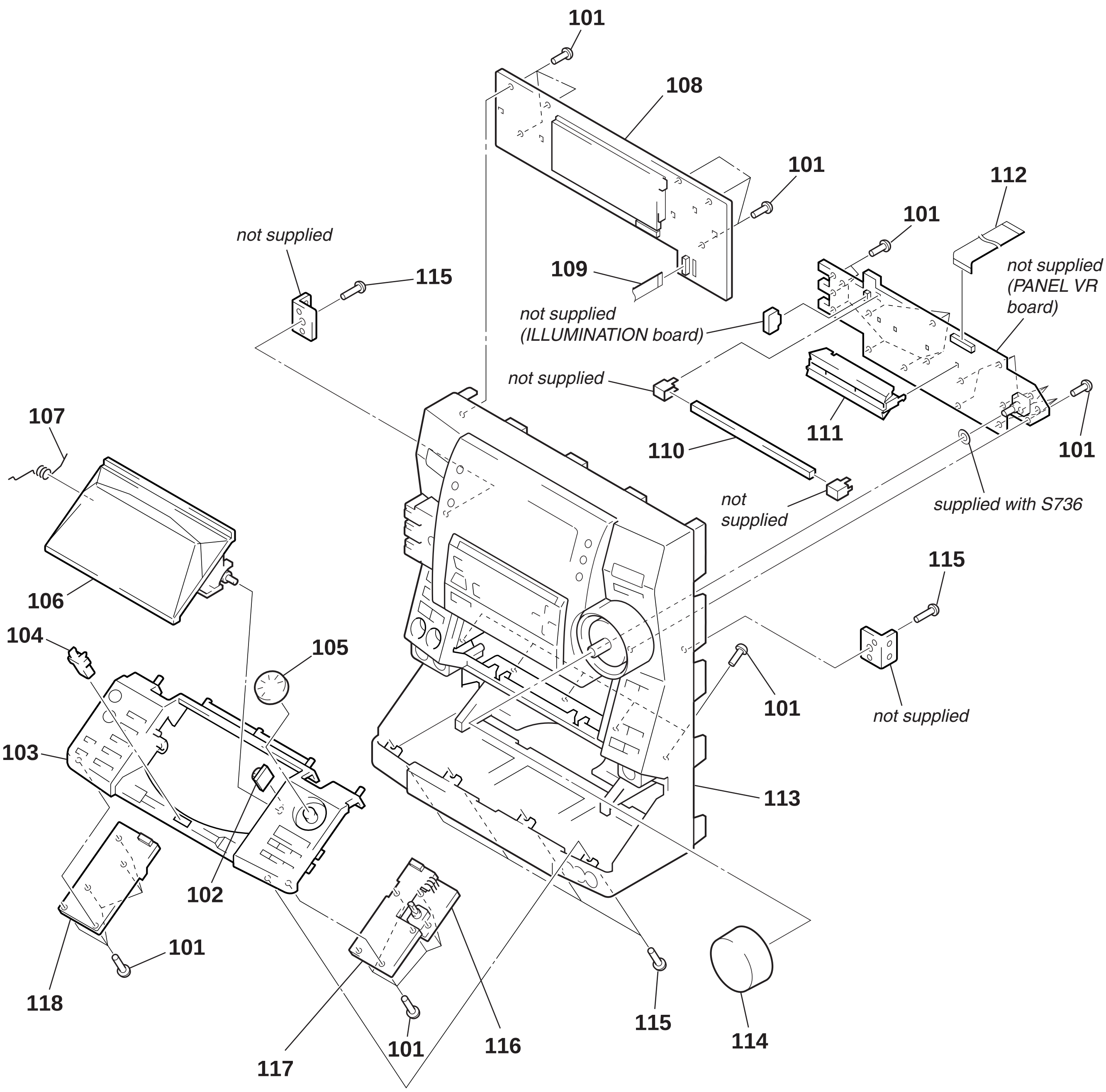
Ref. No.	Part No.	Description	Remark
1	4-948-236-21	CUSHION (107)	
2	3-363-099-01	SCREW (CASE 3 TP2)	
* 3	4-214-777-12	CASE	
4	1-769-977-11	WIRE (FLAT TYPE) (13 CORE) (XG80)	
4	1-773-009-11	WIRE (FLAT TYPE) (15 CORE) (XG700)	
5	1-693-484-11	TUNER (FM/AM) (E2)	
5	1-693-488-11	TUNER (FM/AM) (EA, AR, SP, MX)	
5	1-693-490-11	TUNER (FM/AM) (AEP, UK)	
6	1-535-706-21	PLUG, JUMPER (XG80: MX/XG700)	
7	4-232-088-01	PANEL, BACK (AEP, UK)	
7	4-232-088-11	PANEL, BACK (E2)	
7	4-232-088-21	PANEL, BACK (SP)	
7	4-232-088-31	PANEL, BACK (MX)	
7	4-232-088-41	PANEL, BACK (EA)	
7	4-232-088-51	PANEL, BACK (AR)	
M901	1-763-072-11	FAN, D.C.	

8-2. FRONT PANEL SECTION-1



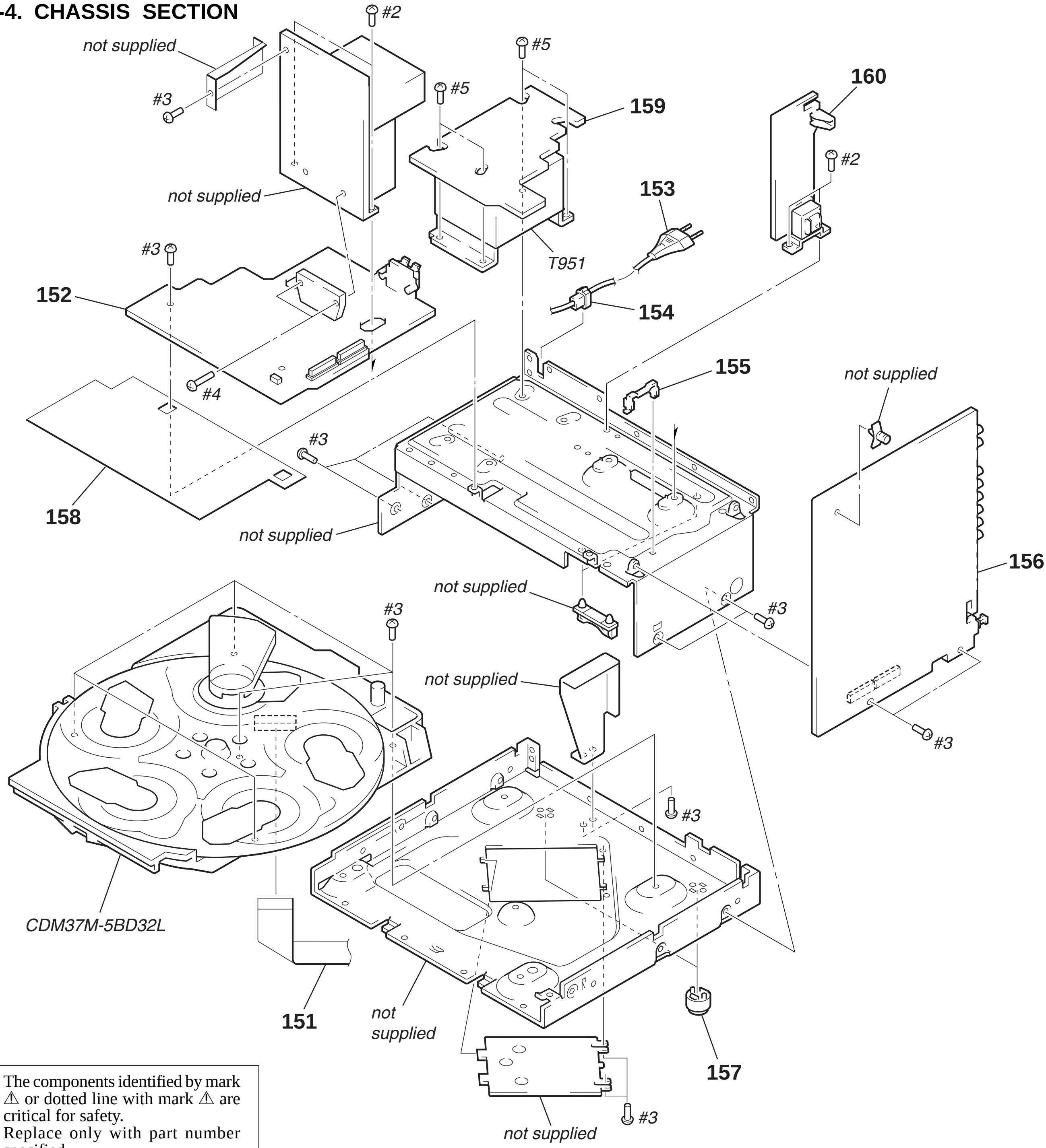
Ref. No.	Part No.	Description	Remark
51	4-232-080-01	COVER (TC)	
52	X-4953-376-1	LID (TC) ASSY	
53	4-232-085-01	SPRING (TC-LID)	
54	4-232-070-01	KNOB (TC-B)	
55	4-232-069-01	KNOB (TC-A)	
56	4-226-537-01	SPRING (TC EJECT), COIL	
57	4-232-067-01	KNOB (MIC)	
58	4-951-620-01	SCREW (2.6X8), +BVTP	
59	4-226-883-01	COVER (EJECT)	
60	4-226-880-01	LEVER (EJECT-A)	
61	4-226-882-01	LEVER (EJECT-C)	
62	4-226-881-01	LEVER (EJECT-B)	
63	4-226-889-01	SPRING (LEVER)	
64	X-4952-464-1	HOLDER (DECK-A) ASSY	
65	4-959-229-11	DETENT, CASSETTE	
66	4-225-509-01	HOLDER (DECK-A)	
67	X-4952-465-1	HOLDER (DECK-B) ASSY	
68	4-225-510-01	HOLDER (DECK-B)	
69	4-224-104-11	DAMPER	
70	4-225-522-01	SPRING (DECK-A)	
71	4-225-523-01	SPRING (DECK-B)	
72	1-773-056-11	WIRE (FLAT TYPE) (17 CORE)	
73	1-773-032-11	WIRE (FLAT TYPE) (15 CORE)	
74	A-4475-552-A	MIC BOARD, COMPLETE	
75	1-680-171-11	TC-A BOARD	
76	1-680-172-11	TC-B BOARD	
77	1-680-181-11	HEADPHONES BOARD	
78	1-680-180-11	FRONT INPUT BOARD	

8-3. FRONT PANEL SECTION-2



Ref. No.	Part No.	Description	Remark
101	4-951-620-01	SCREW (2.6X8), +BVTP	
102	4-224-104-11	DAMPER	
103	X-4953-374-1	PANEL (CD) ASSY, SUB	
104	4-040-472-01	LATCH, D.C.	
105	4-232-068-01	KNOB (CD)	
106	X-4953-377-1	LID (CD) ASSY	
107	4-232-086-01	SPRING (CD)	
108	A-4475-589-A	PANEL FL BOARD, COMPLETE	
109	1-751-688-11	WIRE (FLAT TYPE) (13 CORE)	
110	4-232-072-01	INDICATOR (ILLUMI)	
111	4-232-078-01	HOLDER (LED)	
112	1-773-150-11	WIRE (FLAT TYPE) (21 CORE)	
113	X-4953-379-1	PANEL ASSY, FRONT (XG700)	
113	X-4953-380-1	PANEL ASSY, FRONT (XG80)	
114	4-232-066-01	KNOB (VOL)	
115	4-951-620-11	SCREW (2.6X10), +BVTP	
116	1-680-183-11	CD-R (2) BOARD	
117	1-680-178-11	CD-R (1) BOARD	
118	1-680-177-11	CD-L BOARD	

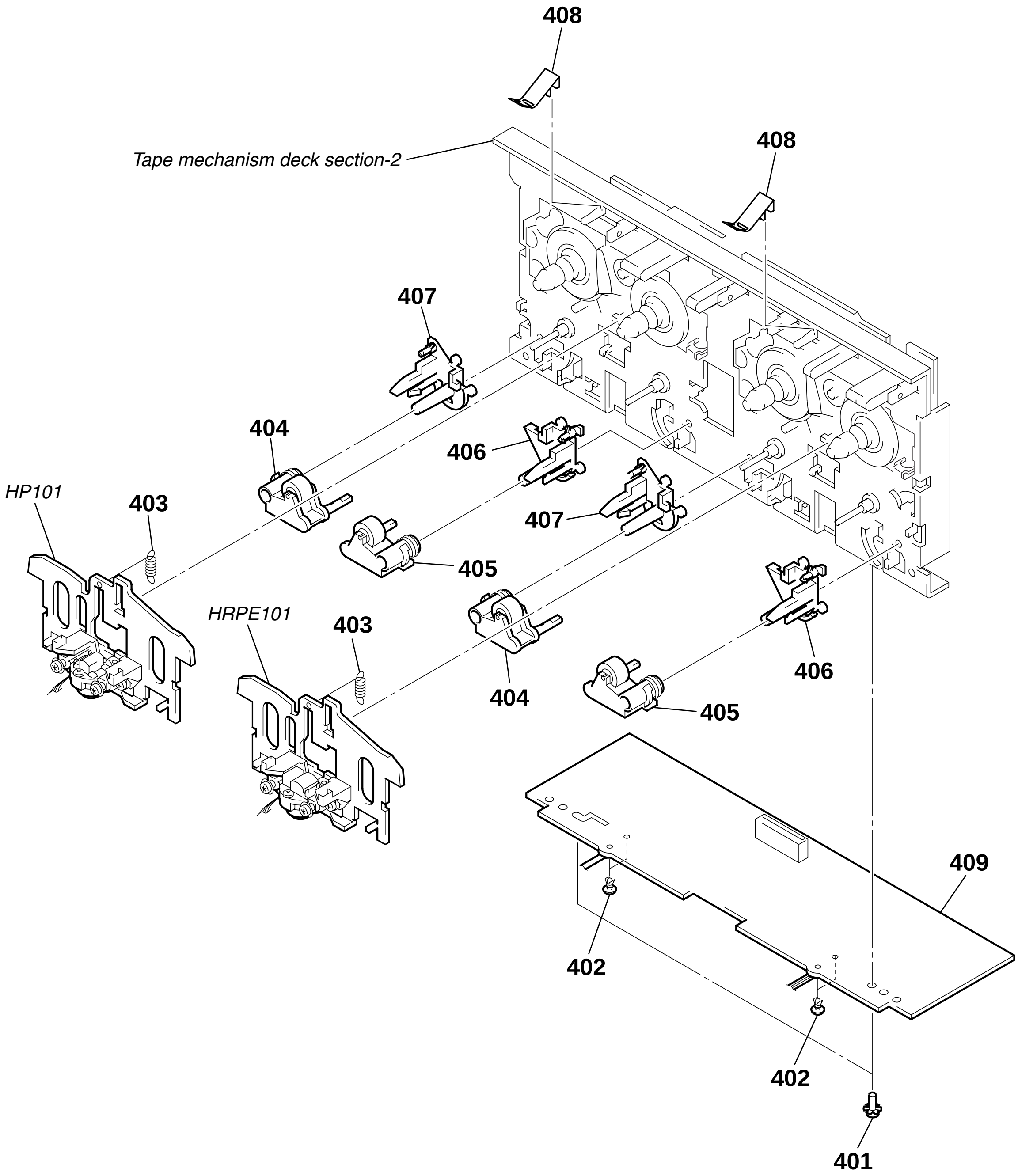
8-4. CHASSIS SECTION



The components identified by mark ⚠ or dotted line with mark ⚠ are critical for safety.
Replace only with part number specified.

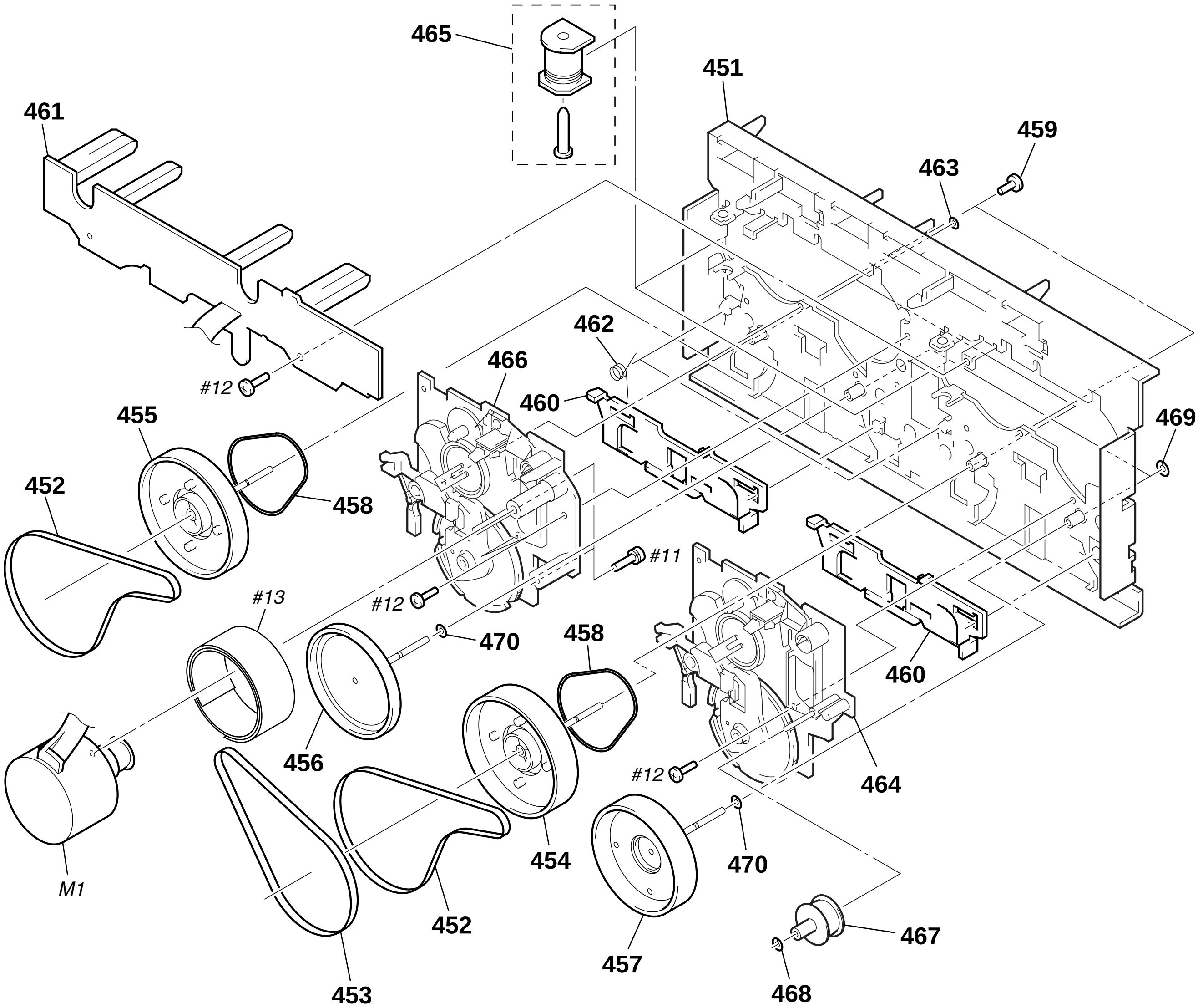
Ref. No.	Part No.	Description	Remark
151	1-790-287-11	WIRE (FLAT TYPE) (19 CORE)	
152	A-4475-583-A	PA BOARD, COMPLETE (E2, MX, AR)	
152	A-4475-591-A	PA BOARD, COMPLETE (AEP, UK)	
152	A-4476-049-A	PA BOARD, COMPLETE (EA, SP)	
⚠153	1-575-653-11	CORD, POWER (MX)	
⚠153	1-777-071-51	CORD, POWER (AEP, UK)	
⚠153	1-777-071-81	CORD, POWER (EA, SP)	
⚠153	1-783-941-12	CORD, POWER (AR)	
⚠153	1-791-901-11	CORD, POWER (E2)	
154	3-703-244-00	BUSHING (FBS001), CORD (XG700)	
154	4-966-266-01	BUSHING (S) (FBS002), CORD (XG80)	
* 155	4-988-533-01	HOLDER, PWB	
156	A-4475-586-A	MAIN BOARD, COMPLETE (E2, AR)	
156	A-4475-594-A	MAIN BOARD, COMPLETE (AEP, UK)	
156	A-4476-051-A	MAIN BOARD, COMPLETE (SP)	
156	A-4476-053-A	MAIN BOARD, COMPLETE (MX)	
156	A-4476-074-A	MAIN BOARD, COMPLETE (EA)	
157	X-494-122-81	FOOT (F22125H-M)	
158	4-235-701-01	COVER DUST	
159	1-680-174-11	TRANS BOARD	
160	1-680-175-11	SUB TRANS BOARD	
⚠T951	1-435-246-11	TRANSFORMER, POWER (XG80)	
⚠T951	1-435-799-11	TRANSFORMER, POWER (XG700)	

8-5. TAPE MECHANISM DECK SECTION-1 (TCM-230PWR42)



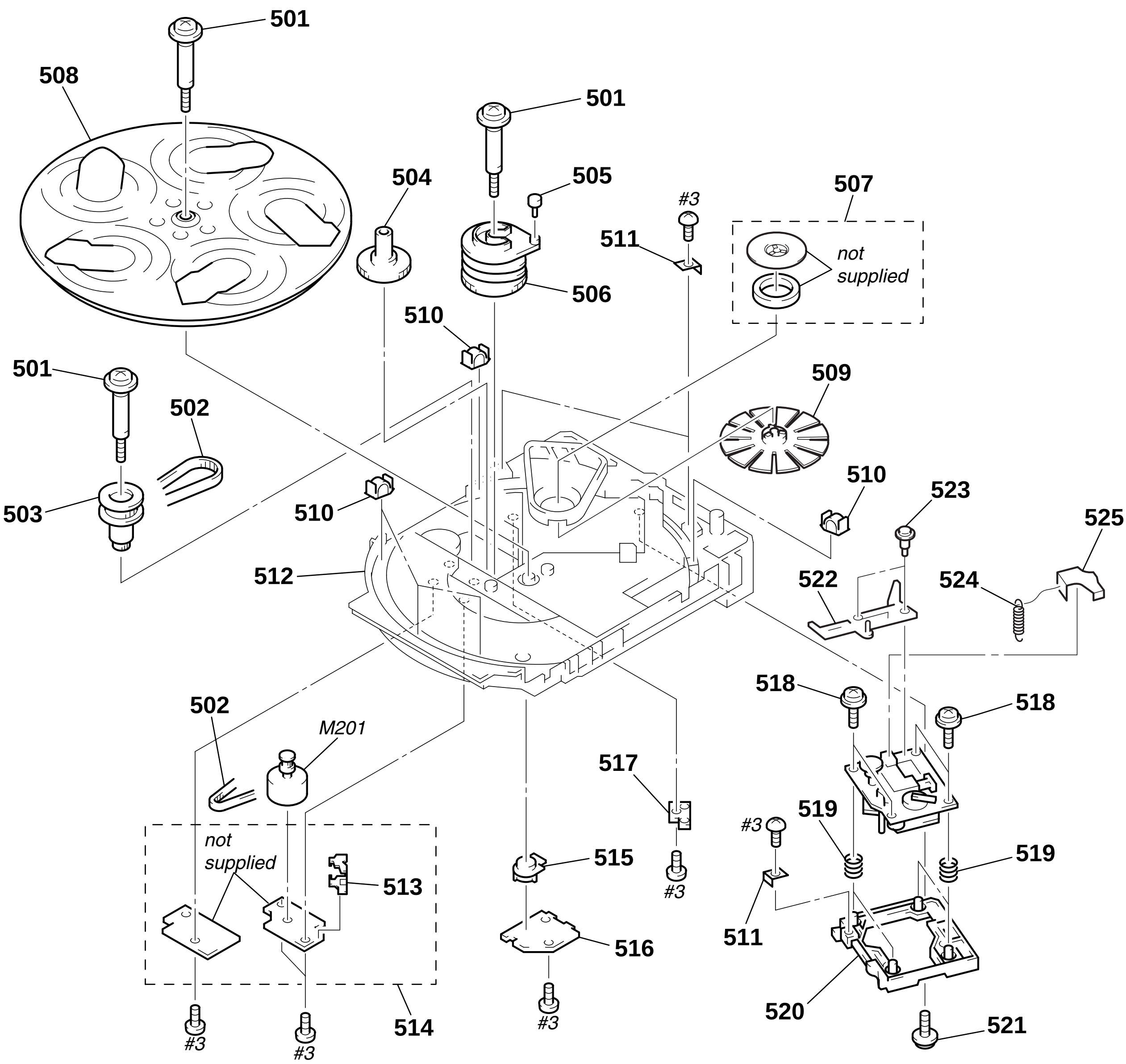
Ref. No.	Part No.	Description	Remark
401	3-376-464-11	SCREW (+PTT 2.6X6), GROUND POINT	
402	3-911-116-42	RIVET, PUSH	
403	3-016-574-01	SPRING (HEAD), TENSION	
404	X-3374-156-5	PINCH LEVER (REV) ASSY	
405	X-3374-155-5	PINCH LEVER (FWD) ASSY	
406	3-017-365-01	BASE (PINCH LEVER FWD)	
407	3-017-366-01	BASE (PINCH LEVER REV)	
408	3-016-567-02	SPRING (CASSETTE), LEAF	
409	A-2007-849-A	AUDIO BOARD, COMPLETE	
HP101	A-2004-778-A	BASE (A) ASSY, HEAD	
HRPE101	A-2004-779-A	BASE (B) ASSY, HEAD	

8-6. TAPE MECHANISM DECK SECTION-2 (TCM-230PWR42)



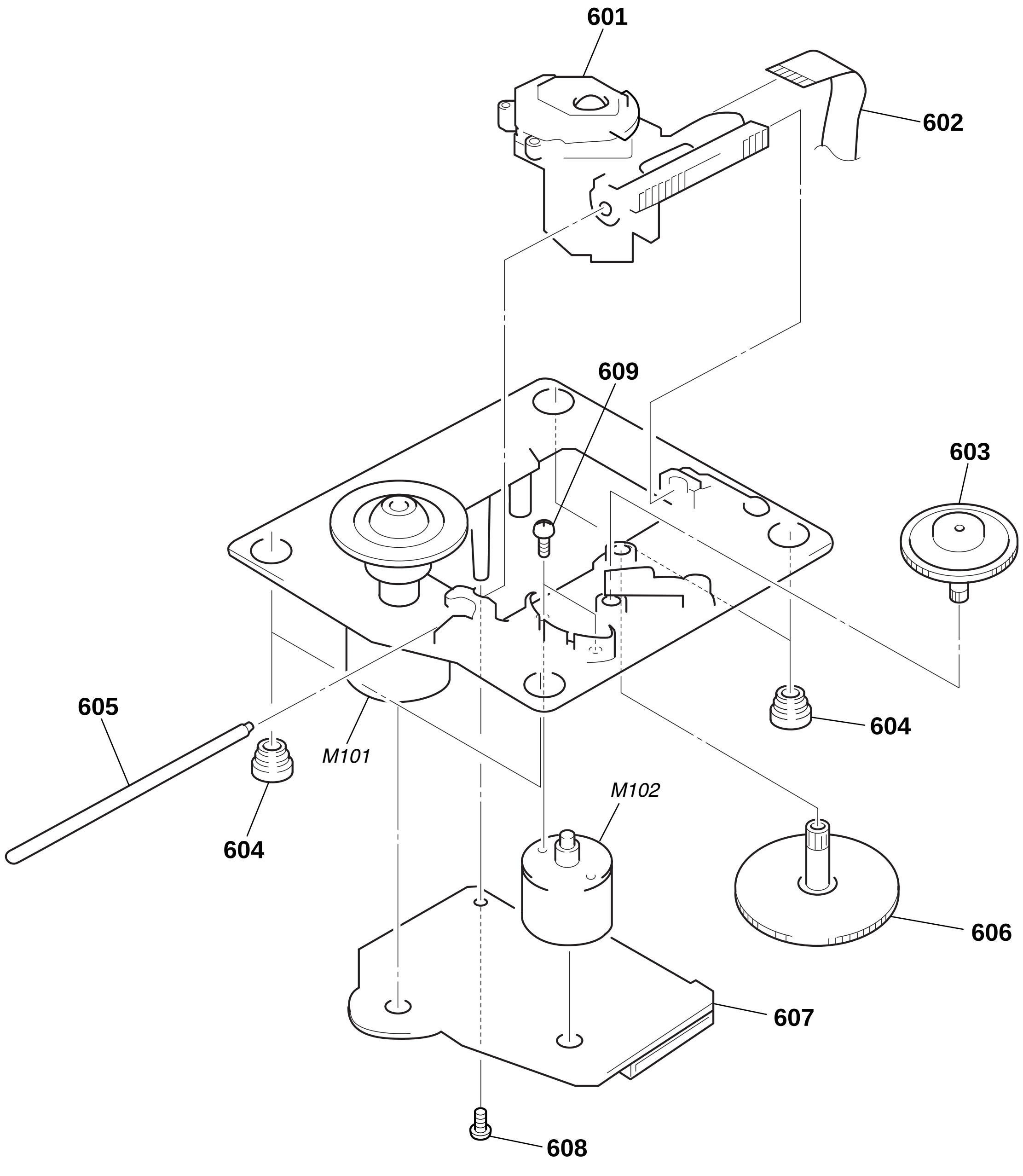
Ref. No.	Part No.	Description	Remark
451	X-4952-881-1	CHASSIS ASSY, MAIN	
452	3-041-946-01	BELT (CAPSTAN B)	
453	4-227-239-01	BELT (CAPSTAN C)	
454	X-3378-247-1	FLYWHEEL (A-FWD) ASSY	
455	X-3378-249-1	FLYWHEEL (B-FWD) ASSY	
456	X-3378-250-1	FLYWHEEL (B-REV) ASSY	
457	X-3378-248-1	FLYWHEEL (A-REV) ASSY	
458	3-041-947-01	BELT (FR)	
459	3-703-454-21	SCREW (1.7X6), TAPPING	
460	3-016-566-01	SLIDER, REVERSE	
461	A-2007-852-A	LEAF SW BOARD, COMPLETE	
462	4-228-450-01	SPRING (REVERSE SLIDER), TORSION	
463	3-019-208-01	WASHER, STOPPER	
464	A-2004-795-A	CHASSIS (A) ASSY, SUB	
465	1-454-887-21	SOLENOID, PLUNGER	
466	A-2004-796-A	CHASSIS (B) ASSY, SUB	
467	3-040-580-11	PULLEY (TENSION)	
468	3-017-407-01	WASHER (FR LEVER), STOPPER	
469	3-359-464-41	WASHER (CAPSTAN)	
470	3-359-464-11	WASHER (CAPSTAN)	
M1	X-3378-246-1	MOTOR ASSY (CAPSTAN) (TAPE)	

8-7. CD MECHANISM DECK SECTION (CDM37M-5BD32L)



Ref. No.	Part No.	Description	Remark
501	4-987-976-01	SCREW, STEP	
502	4-944-490-01	BELT (TIMING)	
503	A-4660-978-A	GEAR (PULLEY) ASSY	
504	4-978-421-01	GEAR (MID)	
505	4-978-425-01	ROLLER (CAM)	
506	4-978-420-01	CAM (HOLDER)	
507	1-452-925-21	MAGNET ASSY	
508	4-978-417-01	TABLE, DISC	
509	4-993-142-03	PULLEY (L), PRESS	
510	X-4947-960-1	ROLLER ASSY	
* 511	4-978-583-01	BRACKET (BU)	
512	4-978-418-01	CHASSIS	
* 513	4-980-385-01	HOLDER (SW)	
* 514	A-4673-765-A	CD MOTOR BOARD, COMPLETE	
515	4-978-426-01	INDICATOR (NO.)	
* 516	1-659-059-13	LED BOARD	
* 517	1-659-058-13	TABLE SENSOR BOARD	
518	4-985-672-01	SCREW (+PTPWHM2.6), FLOATING	
519	4-958-593-01	SPRING (BU), COMPRESSION	
* 520	4-978-419-01	HOLDER (BU-5)	
521	4-998-716-01	SCREW, BU FITTING	
522	4-989-493-01	SLIDER (37)	
523	4-989-494-01	SCREW (SLIDER), STEP	
524	4-989-819-21	SPRING, TENSION	
525	4-989-491-01	COVER, LENS	
M201	A-4660-977-A	MOTOR ASSY (TABLE) (CD)	

8-8. BASE UNIT SECTION (BU-5BD32L)



The components identified by mark ⚠ or dotted line with mark ⚠ are critical for safety.
Replace only with part number specified.

Ref. No.	Part No.	Description	Remark
⚠601	8-820-020-02	OPTICAL PICK-UP KSS-213D/Q-RP	
602	1-782-817-11	WIRE (FLAT TYPE) (16 CORE)	
603	4-917-567-21	GEAR (M)	
604	4-951-940-01	INSULATOR (BU)	
605	4-917-565-01	SHAFT, SLED	
606	4-917-564-01	GEAR (P), FLATNESS	
607	A-4724-486-A	BD BOARD, COMPLETE	
608	4-951-620-01	SCREW (2.6X8), +BVTP	
609	3-713-786-51	SCREW +P 2X3	
M101	X-4917-523-3	MOTOR ASSY (SPINDLE) (CD)	
M102	X-4917-504-1	MOTOR ASSY (SLED) (CD)	

SECTION 9
ELECTRICAL PARTS LIST

AUDIO

NOTE:
- Due to standardization, replacements in the parts list may be different from the parts specified in the diagrams or the components used on the set.
- -XX and -X mean standardized parts, so they may have some difference from the original one.
- RESISTORS
  All resistors are in ohms.
  METAL: Metal-film resistor.
  METAL OXIDE: Metal oxide-film resistor.
  F: nonflammable
- Abbreviation
  AR : Argentina model
  E2 : 120 V AC area in E model
  EA : Saudi Arabia model
  MX : Mexican model
  SP : Singapore model
- Items marked "*" are not stocked since they are seldom required for routine service.
  Some delay should be anticipated when ordering these items.
- SEMICONDUCTORS
  In each case, u: μ, for example:
  uA. . : μA. . uPA. . : μPA. .
  uPB. . : μPB. . uPC. . : μPC. .
  uPD. . : μPD. .
- CAPACITORS
  uF: μF
- COILS
  uH: μH

The components identified by mark ⚠ or dotted line with mark ⚠ are critical for safety.
Replace only with part number specified.

When indicating parts by reference number, please include the board.

Ref. No.	Part No.	Description			Remark
	A-2007-849-A	AUDIO BOARD, COMPLETE			
		**********************			
		< CAPACITOR >			
C301	1-162-289-31	CERAMIC	390PF	10%	50V
C302	1-126-968-11	ELECT	100uF	20%	6.3V
C303	1-162-282-31	CERAMIC	100PF	10%	50V
C304	1-130-483-00	MYLAR	0.01uF	5%	50V
C305	1-128-551-11	ELECT	22uF	20%	25V
C311	1-162-289-31	CERAMIC	390PF	10%	50V
C313	1-162-282-31	CERAMIC	100PF	10%	50V
C314	1-130-487-00	MYLAR	0.022uF	5%	50V
C315	1-126-233-11	ELECT	22uF	20%	50V
C331	1-137-427-11	MYLAR	120PF	5%	50V
C332	1-162-288-31	CERAMIC	330PF	10%	50V
C333	1-162-209-31	CERAMIC	27PF	5%	50V
C401	1-162-289-31	CERAMIC	390PF	10%	50V
C402	1-126-968-11	ELECT	100uF	20%	6.3V
C403	1-162-282-31	CERAMIC	100PF	10%	50V
C404	1-130-483-00	MYLAR	0.01uF	5%	50V
C405	1-128-551-11	ELECT	22uF	20%	25V
C411	1-162-289-31	CERAMIC	390PF	10%	50V
C413	1-162-282-31	CERAMIC	100PF	10%	50V
C414	1-130-487-00	MYLAR	0.022uF	5%	50V
C415	1-126-233-11	ELECT	22uF	20%	50V
C431	1-137-427-11	MYLAR	120PF	5%	50V
C432	1-162-288-31	CERAMIC	330PF	10%	50V
C433	1-162-209-31	CERAMIC	27PF	5%	50V
C601	1-104-396-11	ELECT	10uF	20%	16V
C602	1-104-396-11	ELECT	10uF	20%	16V
C611	1-104-396-11	ELECT	10uF	20%	16V
C612	1-104-396-11	ELECT	10uF	20%	16V
C621	1-137-150-11	FILM	0.01uF	5%	100V
C622	1-126-961-11	ELECT	2.2uF	20%	50V
C623	1-136-155-00	FILM	0.015uF	5%	50V
C624	1-130-481-00	MYLAR	0.0068uF	5%	50V
C625	1-130-481-00	MYLAR	0.0068uF	5%	50V
C627	1-124-903-11	ELECT	1uF	20%	50V
C628	1-136-153-00	FILM	0.01uF	5%	50V
C642	1-104-664-11	ELECT	47uF	20%	16V
		< CONNECTOR >			
CN601	1-695-338-11	PIN, CONNECTOR (PC BOARD) 15P			

Ref. No.	Part No.	Description			Remark
		< IC >			
IC601	8-759-111-44	IC uPC4570C-1			
IC602	8-759-143-54	IC uPC1330HA			
IC611	8-759-111-44	IC uPC4570C-1			
		< COIL >			
L331	1-410-780-11	INDUCTOR	27mH		
L431	1-410-780-11	INDUCTOR	27mH		
		< TRANSISTOR >			
Q621	8-729-142-46	TRANSISTOR	2SC2001-LK		
Q622	8-729-142-46	TRANSISTOR	2SC2001-LK		
Q623	8-729-801-93	TRANSISTOR	2SD1387-3		
		< RESISTOR >			
R301	1-247-881-00	CARBON	120K	5%	1/4W
R302	1-249-409-11	CARBON	220	5%	1/4W
R303	1-249-433-11	CARBON	22K	5%	1/4W
R304	1-247-889-00	CARBON	270K	5%	1/4W
R305	1-247-858-11	CARBON	13K	5%	1/4W
R311	1-247-881-00	CARBON	120K	5%	1/4W
R312	1-247-807-31	CARBON	100	5%	1/4W
R314	1-247-882-11	CARBON	130K	5%	1/4W
R315	1-247-850-11	CARBON	6.2K	5%	1/4W
R331	1-249-430-11	CARBON	12K	5%	1/4W
R401	1-247-881-00	CARBON	120K	5%	1/4W
R402	1-249-409-11	CARBON	220	5%	1/4W
R403	1-249-433-11	CARBON	22K	5%	1/4W
R404	1-247-889-00	CARBON	270K	5%	1/4W
R405	1-247-858-11	CARBON	13K	5%	1/4W
R411	1-247-881-00	CARBON	120K	5%	1/4W
R412	1-247-807-31	CARBON	100	5%	1/4W
R414	1-247-882-11	CARBON	130K	5%	1/4W
R415	1-247-850-11	CARBON	6.2K	5%	1/4W
R431	1-249-430-11	CARBON	12K	5%	1/4W
R481	1-249-416-11	CARBON	820	5%	1/4W
R482	1-249-419-11	CARBON	1.5K	5%	1/4W
R491	1-249-416-11	CARBON	820	5%	1/4W
R492	1-249-419-11	CARBON	1.5K	5%	1/4W
R601	1-249-409-11	CARBON	220	5%	1/4W
R602	1-249-409-11	CARBON	220	5%	1/4W
R608	1-249-409-11	CARBON	220	5%	1/4W

AUDIO | BD

Ref. No.	Part No.	Description			Remark
R609	1-249-433-11	CARBON	22K	5%	1/4W
R611	1-249-409-11	CARBON	220	5%	1/4W
R612	1-249-409-11	CARBON	220	5%	1/4W
⚠R621	1-212-851-00	FUSIBLE	5.6	5%	1/4W F
⚠R622	1-212-851-00	FUSIBLE	5.6	5%	1/4W F
R623	1-249-432-11	CARBON	18K	5%	1/4W
R624	1-249-432-11	CARBON	18K	5%	1/4W
R625	1-249-429-11	CARBON	10K	5%	1/4W
		< VARIABLE RESISTOR >			
RV301	1-238-598-11	RES, ADJ, CARBON 2.2K			
RV311	1-238-598-11	RES, ADJ, CARBON 2.2K			
RV341	1-241-768-11	RES, ADJ, CARBON 220K			
RV441	1-241-768-11	RES, ADJ, CARBON 220K			
		< TRANSFORMER >			
T621	1-423-980-11	TRANSFORMER, BIAS OSCILLATION			

****

Ref. No.	Part No.	Description			Remark
	A-4724-486-A	BD BOARD, COMPLETE			
		*******************			
		< CAPACITOR >			
C101	1-163-005-11	CERAMIC CHIP	470PF	10%	50V
C102	1-164-004-11	CERAMIC CHIP	0.1uF	10%	25V
C103	1-163-005-11	CERAMIC CHIP	470PF	10%	50V
C104	1-163-009-11	CERAMIC CHIP	0.001uF	10%	50V
C108	1-164-004-11	CERAMIC CHIP	0.1uF	10%	25V
C109	1-163-011-11	CERAMIC CHIP	0.0015uF	10%	50V
C110	1-164-182-11	CERAMIC CHIP	0.0033uF	10%	50V
C111	1-163-251-11	CERAMIC CHIP	100PF	5%	50V
C112	1-163-038-11	CERAMIC CHIP	0.1uF		25V
C113	1-163-038-11	CERAMIC CHIP	0.1uF		25V
C114	1-163-038-11	CERAMIC CHIP	0.1uF		25V
C115	1-126-607-11	ELECT CHIP	47uF	20%	4V
C116	1-126-607-11	ELECT CHIP	47uF	20%	4V
C117	1-126-209-11	ELECT CHIP	100uF	20%	4V
C118	1-163-009-11	CERAMIC CHIP	0.001uF	10%	50V
C119	1-163-235-11	CERAMIC CHIP	22PF	5%	50V
C121	1-163-038-11	CERAMIC CHIP	0.1uF		25V
C122	1-126-206-11	ELECT CHIP	100uF	20%	6.3V
C123	1-163-021-11	CERAMIC CHIP	0.01uF	10%	50V
C124	1-107-823-11	CERAMIC CHIP	0.47uF	10%	16V
C125	1-163-038-11	CERAMIC CHIP	0.1uF		25V
C126	1-163-038-11	CERAMIC CHIP	0.1uF		25V
C127	1-128-065-11	ELECT CHIP	68uF	20%	10V
C128	1-163-038-11	CERAMIC CHIP	0.1uF		25V
C129	1-163-031-11	CERAMIC CHIP	0.01uF		50V
C130	1-164-346-11	CERAMIC CHIP	1uF		16V
C131	1-124-779-00	ELECT CHIP	10uF	20%	16V
C133	1-125-838-11	CERAMIC CHIP	2.2uF	10%	6.3V
C140	1-164-346-11	CERAMIC CHIP	1uF		16V
C141	1-164-346-11	CERAMIC CHIP	1uF		16V
C143	1-163-038-11	CERAMIC CHIP	0.1uF		25V
C151	1-163-235-11	CERAMIC CHIP	22PF	5%	50V
C153	1-163-038-11	CERAMIC CHIP	0.1uF		25V
C154	1-110-501-11	CERAMIC CHIP	0.33uF	10%	16V
C156	1-163-235-11	CERAMIC CHIP	22PF	5%	50V
C157	1-163-009-11	CERAMIC CHIP	0.001uF	10%	50V
C159	1-163-019-00	CERAMIC CHIP	0.0068uF	10%	50V
C161	1-126-206-11	ELECT CHIP	100uF	20%	6.3V
C162	1-126-205-11	ELECT CHIP	47uF	20%	6.3V
C163	1-126-206-11	ELECT CHIP	100uF	20%	6.3V
C165	1-163-038-11	CERAMIC CHIP	0.1uF		25V
C167	1-163-235-11	CERAMIC CHIP	22PF	5%	50V
C168	1-163-235-11	CERAMIC CHIP	22PF	5%	50V
C171	1-163-009-11	CERAMIC CHIP	0.001uF	10%	50V
C172	1-163-123-00	CERAMIC CHIP	180PF	5%	50V
C181	1-163-009-11	CERAMIC CHIP	0.001uF	10%	50V
C182	1-163-123-00	CERAMIC CHIP	180PF	5%	50V
		< CONNECTOR >			
CN101	1-778-874-11	CONNECTOR, FFC (LIF (NON-ZIF)) 19P			
CN102	1-777-937-11	CONNECTOR, FFC/FPC 16P			
		< FERRITE BEAD >			
FB101	1-500-445-21	FERRITE	0uH		
FB103	1-500-445-21	FERRITE	0uH		
		< IC >			
IC101	8-752-386-85	IC CXD2587Q			
IC102	8-759-549-28	IC BA5974FP-E2			
IC103	8-752-085-51	IC CXA2568M-T6			
		< TRANSISTOR >			
Q101	8-729-010-08	TRANSISTOR	MSB710-R		
		< RESISTOR >			
R101	1-216-077-00	RES-CHIP	15K	5%	1/10W
R102	1-216-097-11	RES-CHIP	100K	5%	1/10W
R103	1-216-077-00	RES-CHIP	15K	5%	1/10W
R104	1-216-085-00	METAL CHIP	33K	5%	1/10W
R105	1-216-073-00	METAL CHIP	10K	5%	1/10W
R106	1-216-049-11	RES-CHIP	1K	5%	1/10W
R107	1-216-073-00	METAL CHIP	10K	5%	1/10W
R108	1-216-061-00	METAL CHIP	3.3K	5%	1/10W
R109	1-216-121-11	RES-CHIP	1M	5%	1/10W
R110	1-216-025-11	RES-CHIP	100	5%	1/10W
R111	1-216-121-11	RES-CHIP	1M	5%	1/10W
R113	1-216-121-11	RES-CHIP	1M	5%	1/10W
R114	1-216-073-00	METAL CHIP	10K	5%	1/10W
R116	1-216-001-00	METAL CHIP	10	5%	1/10W
R117	1-216-049-11	RES-CHIP	1K	5%	1/10W
R119	1-216-041-00	METAL CHIP	470	5%	1/10W
R123	1-216-073-00	METAL CHIP	10K	5%	1/10W
R124	1-216-097-11	RES-CHIP	100K	5%	1/10W
R131	1-216-033-00	METAL CHIP	220	5%	1/10W
R143	1-216-103-00	METAL CHIP	180K	5%	1/10W
R144	1-216-103-00	METAL CHIP	180K	5%	1/10W
R147	1-216-069-00	METAL CHIP	6.8K	5%	1/10W
R148	1-216-001-00	METAL CHIP	10	5%	1/10W
R149	1-216-001-00	METAL CHIP	10	5%	1/10W
R158	1-216-111-00	METAL CHIP	390K	5%	1/10W
R159	1-216-101-00	METAL CHIP	150K	5%	1/10W
R161	1-216-308-00	METAL CHIP	4.7	5%	1/10W

The components identified by mark ⚠ or dotted line with mark ⚠ are critical for safety.
Replace only with part number specified.

Ref. No.	Part No.	Description			Remark
R162	1-216-101-00	METAL CHIP	150K	5%	1/10W
R171	1-216-078-00	RES-CHIP	16K	5%	1/10W
R172	1-216-073-00	METAL CHIP	10K	5%	1/10W
R173	1-216-077-00	RES-CHIP	15K	5%	1/10W
R181	1-216-078-00	RES-CHIP	16K	5%	1/10W
R182	1-216-073-00	METAL CHIP	10K	5%	1/10W
R183	1-216-077-00	RES-CHIP	15K	5%	1/10W
		< NETWORK RESISTOR >			
RN101	1-233-576-11	RES, CHIP NETWORK 100			
RN102	1-233-576-11	RES, CHIP NETWORK 100			
		< SWITCH >			
S101	1-572-085-11	SWITCH, LEAF (LIMIT)			
		< VIBRATOR >			
X101	1-767-408-21	VIBRATOR, CRYSTAL (16.9344MHz)			

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Ref. No.	Part No.	Description			Remark
*	A-4673-765-A	CD MOTOR BOARD, COMPLETE			
		**************************			
*	4-980-385-01	HOLDER (SW)			
		< CAPACITOR >			
C201	1-126-964-11	ELECT	10uF	20%	50V
C202	1-164-159-21	CERAMIC	0.1uF		50V
C203	1-126-964-11	ELECT	10uF	20%	50V
		< CONNECTOR >			
* CN201	1-568-947-11	PIN, CONNECTOR 9P			
		< IC >			
IC201	8-759-365-94	IC TA8409S			
		< COIL >			
L201	1-408-117-00	INDUCTOR	10uH		
		< RESISTOR >			
R205	1-249-427-11	CARBON	6.8K	5%	1/4W
R206	1-249-425-11	CARBON	4.7K	5%	1/4W
		< SWITCH >			
S201	1-762-587-11	SWITCH, PUSH (1 KEY) (UP)			

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Ref. No.	Part No.	Description			Remark
	1-680-177-11	CD-L BOARD			
		***********			
		< CAPACITOR >			
C741	1-162-306-11	CERAMIC	0.01uF	30%	16V
		< CONNECTOR >			
CN704	1-785-332-11	PIN, CONNECTOR (LIGHT ANGLE) 6P			
		< LED >			
D741	8-719-058-04	LED SEL5223S-TP15 (NON-STOP)			
		< RESISTOR >			
R741	1-249-407-11	CARBON	150	5%	1/4W
R742	1-249-438-11	CARBON	56K	5%	1/4W
R743	1-249-420-11	CARBON	1.8K	5%	1/4W
R744	1-249-422-11	CARBON	2.7K	5%	1/4W
R745	1-247-843-11	CARBON	3.3K	5%	1/4W
R746	1-249-425-11	CARBON	4.7K	5%	1/4W
R747	1-249-427-11	CARBON	6.8K	5%	1/4W
R748	1-249-429-11	CARBON	10K	5%	1/4W
R749	1-249-431-11	CARBON	15K	5%	1/4W
R750	1-249-434-11	CARBON	27K	5%	1/4W
		< SWITCH >			
S741	1-762-875-21	SWITCH, KEYBOARD (LOOP)			
S742	1-762-587-11	SWITCH, PUSH (1 KEY) (LID (CD) OPEN/CLOSE)			
S743	1-762-875-21	SWITCH, KEYBOARD (FLASH)			
S744	1-762-875-21	SWITCH, KEYBOARD (EDIT)			
S745	1-762-875-21	SWITCH, KEYBOARD (NON-STOP)			
S746	1-762-875-21	SWITCH, KEYBOARD (DISC 1)			
S747	1-762-875-21	SWITCH, KEYBOARD (DISC 2)			
S748	1-762-875-21	SWITCH, KEYBOARD (DISC 3)			
S749	1-762-875-21	SWITCH, KEYBOARD (DISC 4)			
S750	1-762-875-21	SWITCH, KEYBOARD (DISC 5)			

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Ref. No.	Part No.	Description			Remark
	1-680-178-11	CD-R (1) BOARD			
		**************			
		< CONNECTOR >			
CN703	1-785-333-11	PIN, CONNECTOR (LIGHT ANGLE) 7P			
		< LED >			
D700	8-719-056-13	LED SML79423C-TP15 (▷❚❚)			
		< RESISTOR >			
R751	1-249-415-11	CARBON	680	5%	1/4W
R752	1-249-417-11	CARBON	1K	5%	1/4W
R753	1-249-418-11	CARBON	1.2K	5%	1/4W
R754	1-249-420-11	CARBON	1.8K	5%	1/4W
R755	1-249-422-11	CARBON	2.7K	5%	1/4W
R756	1-247-843-11	CARBON	3.3K	5%	1/4W
R757	1-249-425-11	CARBON	4.7K	5%	1/4W
R758	1-249-403-11	CARBON	68	5%	1/4W
R759	1-249-403-11	CARBON	68	5%	1/4W
		< SWITCH >			
S751	1-762-875-21	SWITCH, KEYBOARD (▷❚❚)			
S752	1-762-875-21	SWITCH, KEYBOARD (■)			
S753	1-762-875-21	SWITCH, KEYBOARD (◀◀)			
S754	1-762-875-21	SWITCH, KEYBOARD (▶▶)			
S755	1-762-875-21	SWITCH, KEYBOARD (DISC SKIP)			
S756	1-762-875-21	SWITCH, KEYBOARD (REPEAT)			
S757	1-762-875-21	SWITCH, KEYBOARD (PLAY MODE)			

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CD-R (2) | FRONT INPUT | HEADPHONES | ILLUMINATION | LEAF SW

Ref. No.	Part No.	Description			Remark
	1-680-183-11	CD-R (2) BOARD			
		**************			
		< CAPACITOR >			
C751	1-162-306-11	CERAMIC	0.01uF	30%	16V
C752	1-162-306-11	CERAMIC	0.01uF	30%	16V
		< ROTARY ENCODER >			
S763	1-473-393-11	ENCODER, ROTARY (JOG DIAL)			

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Ref. No.	Part No.	Description			Remark
	1-680-180-11	FRONT INPUT BOARD			
		******************			
		< CAPACITOR >			
C801	1-162-294-31	CERAMIC	0.001uF	10%	50V
C802	1-162-294-31	CERAMIC	0.001uF	10%	50V
C803	1-126-960-11	ELECT	1uF	20%	50V
C811	1-162-282-31	CERAMIC	100PF	10%	50V
C812	1-164-159-21	CERAMIC	0.1uF		50V
		< NOISE FILTER >			
FL803	1-424-228-11	FILTER, NOISE			
		< JACK >			
J804	1-815-310-11	JACK 3P (GAME INPUT AUDIO/VIDEO)			
		< RESISTOR >			
R801	1-249-417-11	CARBON	1K	5%	1/4W
R802	1-249-437-11	CARBON	47K	5%	1/4W
R803	1-249-417-11	CARBON	1K	5%	1/4W
R804	1-249-437-11	CARBON	47K	5%	1/4W
R805	1-247-804-11	CARBON	75	5%	1/4W

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Ref. No.	Part No.	Description			Remark
	1-680-181-11	HEADPHONES BOARD			
		******************			
		< CAPACITOR >			
C891	1-162-294-31	CERAMIC	0.001uF	10%	50V
C892	1-162-294-31	CERAMIC	0.001uF	10%	50V
C893	1-164-159-21	CERAMIC	0.1uF		50V
		< CONNECTOR >			
CN802	1-785-330-11	PIN, CONNECTOR (LIGHT ANGLE) 4P			
		< JACK >			
J803	1-770-226-11	JACK (LARGE TYPE) (PHONES)			
		< RESISTOR >			
R810	1-247-807-31	CARBON	100	5%	1/4W

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Ref. No.	Part No.	Description			Remark
		ILLUMINATION BOARD			
		*******************			
		< CAPACITOR >			
C791	1-162-974-11	CERAMIC CHIP	0.01uF		50V
C792	1-162-974-11	CERAMIC CHIP	0.01uF		50V
C793	1-162-974-11	CERAMIC CHIP	0.01uF		50V
		< CONNECTOR >			
CN791	1-770-011-41	CONNECTOR, BOARD TO BOARD 4P			
		< LED >			
D791	8-719-075-87	LED SECU3M02C (ILLUMINATION)			

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Ref. No.	Part No.	Description			Remark
	A-2007-852-A	LEAF SW BOARD, COMPLETE			
		************************			
		< CAPACITOR >			
C1001	1-107-716-11	ELECT	33uF	20%	10V
		< CONNECTOR >			
CN1001	1-784-459-11	CONNECTOR, FFC/FPC 17P			
		< DIODE >			
D1001	8-719-991-33	DIODE 1SS133T-77			
D1002	8-719-991-33	DIODE 1SS133T-77			
		< PHOTO INTERRUPTER >			
IC1001	8-749-014-38	PHOTO INTERRUPTER SG-264			
IC1002	8-749-014-38	PHOTO INTERRUPTER SG-264			
		< TRANSISTOR >			
Q1001	8-729-029-56	TRANSISTOR	DTA144ESA		
		< RESISTOR >			
R907	1-249-441-11	CARBON	100K	5%	1/4W
R1001	1-249-409-11	CARBON	220	5%	1/4W
R1002	1-249-409-11	CARBON	220	5%	1/4W
R1003	1-249-414-11	CARBON	560	5%	1/4W
R1004	1-247-834-11	CARBON	1.3K	5%	1/4W
R1005	1-247-818-11	CARBON	300	5%	1/4W
R1006	1-247-864-11	CARBON	24K	5%	1/4W
R1007	1-247-852-11	CARBON	7.5K	5%	1/4W
R1008	1-249-417-11	CARBON	1K	5%	1/4W
		< VARIABLE RESISTOR >			
RV1001	1-241-785-11	RES, ADJ, CARBON 10K			
RV1002	1-241-785-11	RES, ADJ, CARBON 10K			
		< SWITCH >			
S1001	1-570-953-11	SWITCH, PUSH (1 KEY) (DECK A PLAY)			
S1002	1-570-953-11	SWITCH, PUSH (1 KEY) (DECK B PLAY)			
S1003	1-771-333-11	SWITCH, LEAF (DECK A HALF)			
S1004	1-771-205-11	SWITCH, LEAF (DECK A 120/70)			
S1005	1-771-205-11	SWITCH, LEAF (DECK A REC)			

Ref. No.	Part No.	Description			Remark
S1006	1-771-333-11	SWITCH, LEAF (DECK B HALF)			
S1008	1-771-205-11	SWITCH, LEAF (DECK B 120/70)			
S1009	1-771-205-11	SWITCH, LEAF (DECK B REC)			

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Ref. No.	Part No.	Description			Remark
*	1-659-059-13	LED BOARD			
		**********			
		< LED >			
D201	8-719-032-98	LED SEL5820A (DISC No.)			
		< TRANSISTOR >			
Q201	8-729-119-78	TRANSISTOR	2SC2785-HFE		
		< RESISTOR >			
R201	1-249-433-11	CARBON	22K	5%	1/4W
R202	1-249-411-11	CARBON	330	5%	1/4W
R203	1-249-437-11	CARBON	47K	5%	1/4W

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Ref. No.	Part No.	Description			Remark
	A-4475-586-A	MAIN BOARD, COMPLETE (E2, AR)			
	A-4475-594-A	MAIN BOARD, COMPLETE (AEP, UK)			
	A-4476-051-A	MAIN BOARD, COMPLETE (SP)			
	A-4476-053-A	MAIN BOARD, COMPLETE (MX)			
	A-4476-074-A	MAIN BOARD, COMPLETE (EA)			
		*********************			
	4-875-327-31	HEAT SINK			
	4-948-236-21	CUSHION (107)			
	7-685-646-79	SCREW +BVTP 3X8 TYPE2 N-S			
		< CAPACITOR >			
C111	1-137-195-11	FILM	0.56uF	5%	50V
C112	1-130-488-00	MYLAR	0.027uF	5%	50V
C113	1-136-167-00	FILM	0.15uF	5%	50V
C114	1-130-480-00	MYLAR	0.0056uF	5%	50V
C115	1-130-489-00	MYLAR	0.033uF	5%	50V
C116	1-130-473-00	MYLAR	0.0015uF	5%	50V
C117	1-130-483-00	MYLAR	0.01uF	5%	50V
C118	1-162-959-11	CERAMIC CHIP	330PF	5%	50V
C119	1-130-477-00	MYLAR	0.0033uF	5%	50V
C120	1-130-477-00	MYLAR	0.0033uF	5%	50V
C121	1-126-964-11	ELECT	10uF	20%	50V
C122	1-164-363-11	CERAMIC CHIP	560PF	5%	50V
C123	1-136-169-00	FILM	0.22uF	5%	50V
C124	1-136-169-00	FILM	0.22uF	5%	50V
C125	1-126-964-11	ELECT	10uF	20%	50V
C131	1-104-664-11	ELECT	47uF	20%	16V
C132	1-104-664-11	ELECT	47uF	20%	16V
C135	1-126-964-11	ELECT	10uF	20%	50V
C161	1-137-195-11	FILM	0.56uF	5%	50V
C162	1-130-488-00	MYLAR	0.027uF	5%	50V
C163	1-136-167-00	FILM	0.15uF	5%	50V
C164	1-130-480-00	MYLAR	0.0056uF	5%	50V
C165	1-130-489-00	MYLAR	0.033uF	5%	50V
C166	1-130-473-00	MYLAR	0.0015uF	5%	50V
C167	1-130-483-00	MYLAR	0.01uF	5%	50V
C168	1-162-959-11	CERAMIC CHIP	330PF	5%	50V
C169	1-130-477-00	MYLAR	0.0033uF	5%	50V
C170	1-130-477-00	MYLAR	0.0033uF	5%	50V
C171	1-126-964-11	ELECT	10uF	20%	50V
C172	1-164-363-11	CERAMIC CHIP	560PF	5%	50V
C173	1-136-169-00	FILM	0.22uF	5%	50V
C174	1-136-169-00	FILM	0.22uF	5%	50V
C175	1-126-964-11	ELECT	10uF	20%	50V
C176	1-130-493-00	MYLAR	0.068uF	5%	50V
C177	1-130-483-00	MYLAR	0.01uF	5%	50V
C181	1-164-156-11	CERAMIC CHIP	0.1uF		25V
C182	1-164-156-11	CERAMIC CHIP	0.1uF		25V
C183	1-164-156-11	CERAMIC CHIP	0.1uF		25V
C191	1-162-974-11	CERAMIC CHIP	0.01uF		50V
C192	1-164-156-11	CERAMIC CHIP	0.1uF		25V
C193	1-126-964-11	ELECT	10uF	20%	50V
C301	1-126-960-11	ELECT	1uF	20%	50V
C302	1-130-479-00	MYLAR	0.0047uF	5%	50V
C303	1-136-165-00	FILM	0.1uF	5%	50V
C304	1-136-165-00	FILM	0.1uF	5%	50V
C305	1-126-964-11	ELECT	10uF	20%	50V
C306	1-126-960-11	ELECT	1uF	20%	50V
C307	1-126-959-11	ELECT	0.47uF	20%	50V
C308	1-126-964-11	ELECT	10uF	20%	50V
C309	1-137-194-81	FILM	0.47uF	5%	50V
C310	1-162-962-11	CERAMIC CHIP	470PF	10%	50V
C311	1-126-964-11	ELECT	10uF	20%	50V
C312	1-126-959-11	ELECT	0.47uF	20%	50V
C313	1-162-964-11	CERAMIC CHIP	0.001uF	10%	50V
C314	1-126-964-11	ELECT	10uF	20%	50V
C315	1-126-963-11	ELECT	4.7uF	20%	50V
C316	1-104-664-11	ELECT	47uF	20%	16V
C317	1-104-664-11	ELECT	47uF	20%	16V
C320	1-162-962-11	CERAMIC CHIP	470PF	10%	50V
C333	1-162-968-11	CERAMIC CHIP	0.0047uF	10%	50V
C334	1-162-968-11	CERAMIC CHIP	0.0047uF	10%	50V
C351	1-126-960-11	ELECT	1uF	20%	50V
C352	1-130-479-00	MYLAR	0.0047uF	5%	50V
C353	1-136-165-00	FILM	0.1uF	5%	50V
C354	1-136-165-00	FILM	0.1uF	5%	50V
C355	1-126-964-11	ELECT	10uF	20%	50V
C356	1-126-960-11	ELECT	1uF	20%	50V
C357	1-126-959-11	ELECT	0.47uF	20%	50V
C358	1-126-964-11	ELECT	10uF	20%	50V
C359	1-137-194-81	FILM	0.47uF	5%	50V
C401	1-126-961-11	ELECT	2.2uF	20%	50V
C411	1-164-156-11	CERAMIC CHIP	0.1uF		25V
C412	1-164-156-11	CERAMIC CHIP	0.1uF		25V
C413	1-126-916-11	ELECT	1000uF	20%	6.3V
C414	1-126-916-11	ELECT	1000uF	20%	6.3V
C416	1-126-935-11	ELECT	470uF	20%	10V
C431	1-164-156-11	CERAMIC CHIP	0.1uF		25V
C451	1-126-961-11	ELECT	2.2uF	20%	50V
C510	1-162-918-11	CERAMIC CHIP	18PF	5%	50V
C511	1-162-919-11	CERAMIC CHIP	22PF	5%	50V
C516	1-164-156-11	CERAMIC CHIP	0.1uF		25V
C562	1-164-156-11	CERAMIC CHIP	0.1uF		25V
C564	1-104-664-11	ELECT	47uF	20%	16V
C598	1-163-038-11	CERAMIC CHIP	0.1uF		25V
C599	1-104-664-11	ELECT	47uF	20%	16V

MAIN

Ref. No.	Part No.	Description			Remark
C601	1-162-959-11	CERAMIC CHIP	330PF	5%	50V
C602	1-162-927-11	CERAMIC CHIP	100PF	5%	50V
C603	1-162-927-11	CERAMIC CHIP	100PF	5%	50V
C604	1-126-961-11	ELECT	2.2uF	20%	50V (XG80)
C604	1-126-963-11	ELECT	4.7uF	20%	50V (XG700)
C605	1-130-479-00	MYLAR	0.0047uF	5%	50V
C606	1-130-473-00	MYLAR	0.0015uF	5%	50V
C607	1-136-159-00	FILM	0.033uF	5%	50V (XG80)
C607	1-136-165-00	FILM	0.1uF	5%	50V (XG700)
C608	1-162-974-11	CERAMIC CHIP	0.01uF		50V
C609	1-126-933-11	ELECT	100uF	20%	16V
C651	1-162-959-11	CERAMIC CHIP	330PF	5%	50V
C652	1-162-927-11	CERAMIC CHIP	100PF	5%	50V
C653	1-162-927-11	CERAMIC CHIP	100PF	5%	50V
C654	1-126-961-11	ELECT	2.2uF	20%	50V (XG80)
C654	1-126-963-11	ELECT	4.7uF	20%	50V (XG700)
C655	1-130-479-00	MYLAR	0.0047uF	5%	50V
C656	1-130-473-00	MYLAR	0.0015uF	5%	50V
C657	1-136-159-00	FILM	0.033uF	5%	50V (XG80)
C657	1-136-165-00	FILM	0.1uF	5%	50V (XG700)
C658	1-162-974-11	CERAMIC CHIP	0.01uF		50V
C659	1-126-933-11	ELECT	100uF	20%	16V
C699	1-162-974-11	CERAMIC CHIP	0.01uF		50V
C701	1-162-960-11	CERAMIC CHIP	220PF	10%	50V
C702	1-162-960-11	CERAMIC CHIP	220PF	10%	50V
C703	1-162-960-11	CERAMIC CHIP	220PF	10%	50V
C704	1-162-960-11	CERAMIC CHIP	220PF	10%	50V (AEP, UK, MX)
C705	1-162-960-11	CERAMIC CHIP	220PF	10%	50V (AEP, UK, MX)
C721	1-126-960-11	ELECT	1uF	20%	50V
C722	1-126-926-11	ELECT	1000uF	20%	10V
C724	1-162-962-11	CERAMIC CHIP	470PF	10%	50V
C751	1-162-960-11	CERAMIC CHIP	220PF	10%	50V
C752	1-162-960-11	CERAMIC CHIP	220PF	10%	50V
C753	1-162-960-11	CERAMIC CHIP	220PF	10%	50V
C772	1-164-156-11	CERAMIC CHIP	0.1uF		25V
C774	1-164-156-11	CERAMIC CHIP	0.1uF		25V
C777	1-164-156-11	CERAMIC CHIP	0.1uF		25V
C782	1-104-664-11	ELECT	47uF	20%	16V
C803	1-126-964-11	ELECT	10uF	20%	50V
C804	1-136-165-00	FILM	0.1uF	5%	50V
C805	1-136-165-00	FILM	0.1uF	5%	50V
C806	1-126-916-11	ELECT	1000uF	20%	6.3V
C808	1-109-953-11	ELECT	2.2uF	20%	50V
C902	1-126-937-11	ELECT	4700uF	20%	16V
C903	1-126-964-11	ELECT	10uF	20%	50V
C904	1-126-964-11	ELECT	10uF	20%	50V
C905	1-126-935-11	ELECT	470uF	20%	10V
C911	1-126-964-11	ELECT	10uF	20%	50V
C912	1-126-916-11	ELECT	1000uF	20%	6.3V
C913	1-104-664-11	ELECT	47uF	20%	16V

Ref. No.	Part No.	Description			Remark
C914	1-126-916-11	ELECT	1000uF	20%	6.3V
C932	1-126-964-11	ELECT	10uF	20%	50V
C933	1-126-933-11	ELECT	100uF	20%	16V
C934	1-126-964-11	ELECT	10uF	20%	50V
C935	1-126-767-11	ELECT	1000uF	20%	16V
C936	1-126-964-11	ELECT	10uF	20%	50V
C937	1-126-933-11	ELECT	100uF	20%	16V
C938	1-126-933-11	ELECT	100uF	20%	16V
C952	1-126-943-11	ELECT	2200uF	20%	25V
C953	1-126-964-11	ELECT	10uF	20%	50V
C954	1-126-964-11	ELECT	10uF	20%	50V
C955	1-126-935-11	ELECT	470uF	20%	10V
C961	1-164-156-11	CERAMIC CHIP	0.1uF		25V
		< CONNECTOR >			
CN303	1-784-776-11	CONNECTOR, FFC 15P			
CN304	1-784-778-11	CONNECTOR, FFC 17P			
CN411	1-784-780-11	CONNECTOR, FFC 19P			
CN412	1-785-321-11	PIN, CONNECTOR (STRAIGHT) 9P			
CN431	1-784-774-11	CONNECTOR, FFC 13P			
CN441	1-563-616-11	CONNECTOR, FLEXIBLE 13P (XG80)			
CN441	1-750-747-11	CONNECTOR, FFC/FPC 15P (XG700)			
CN452	1-785-316-11	PIN, CONNECTOR (STRAIGHT) 4P			
CN702	1-691-767-11	PLUG (MICRO CONNECTOR) 5P			
CN901	1-778-982-21	CONNECTOR, BOARD TO BOARD 13P			
CN902	1-778-982-21	CONNECTOR, BOARD TO BOARD 13P			
CN903	1-564-506-11	PLUG, CONNECTOR 3P			
		< DIODE >			
D191	8-719-988-61	DIODE 1SS355TE-17			
D192	8-719-988-61	DIODE 1SS355TE-17			
D193	8-719-988-61	DIODE 1SS355TE-17			
D194	8-719-988-61	DIODE 1SS355TE-17			
D501	8-719-988-61	DIODE 1SS355TE-17			
D534	8-719-988-61	DIODE 1SS355TE-17			
D801	8-719-988-61	DIODE 1SS355TE-17			
D802	8-719-988-61	DIODE 1SS355TE-17			
D803	8-719-988-61	DIODE 1SS355TE-17			
D804	8-719-988-61	DIODE 1SS355TE-17			
D805	8-719-988-61	DIODE 1SS355TE-17			
D806	8-719-988-61	DIODE 1SS355TE-17			
D807	8-719-988-61	DIODE 1SS355TE-17			
D808	8-719-210-33	DIODE EC10DS2			
D911	8-719-988-61	DIODE 1SS355TE-17			
D912	8-719-210-33	DIODE EC10DS2			
D913	8-719-210-33	DIODE EC10DS2			
D931	8-719-210-33	DIODE EC10DS2			
D951	8-719-988-61	DIODE 1SS355TE-17			
		< FERRITE BEAD >			
FB412	1-414-772-11	FERRITE	0uH		
FB413	1-414-551-11	FERRITE	0uH		
FB415	1-414-772-11	FERRITE	0uH		
		< FILTER >			
FL501	1-233-289-21	FILTER, EMI (SMD)			
FL502	1-233-289-21	FILTER, EMI (SMD)			

MAIN

Ref. No.	Part No.	Description	Remark
FL503	1-233-289-21	FILTER, EMI (SMD)	
		< IC >	
IC101	8-759-571-54	IC M62493FP	
IC181	8-759-009-06	IC MC14052BFEL	
IC191	8-759-571-53	IC BA7615N	
IC301	8-759-495-26	IC HA12215F	
IC501	8-759-827-40	IC M30622MAA-A92FP	
IC601	8-759-100-96	IC NJM4558M-T1	
IC781	8-749-923-04	IC TOTX178A (CD DIGITAL OUT OPTICAL)	
IC801	8-759-635-63	IC M51943BSL-TP	
IC901	8-759-071-48	IC TA7807S	
IC911	8-759-039-69	IC uPC7805AHF	
IC931	8-759-604-38	IC M5F78M10L	
IC932	8-759-088-08	IC uPC7812AHF	
IC933	8-759-071-48	IC TA7807S	
IC951	8-759-604-90	IC M5F7907L	
		< JACK >	
J701	1-794-148-21	JACK, PIN 8P (PHONO IN, MD IN/OUT, VIDEO AUDIO IN)	
J702	1-815-043-11	JACK, PIN 2P (VIDEO VIDEO IN, VIDEO OUT)	
J705	1-573-028-31	JACK, PIN 4P (DJ MIX RETURN/SEND)	(AEP, UK, MX)
		< SHORT >	
JR1	1-216-295-11	SHORT 0	
JR2	1-216-296-11	SHORT 0	
JR3	1-216-296-11	SHORT 0	
JR4	1-216-295-11	SHORT 0	
JR5	1-216-295-11	SHORT 0	
JR6	1-216-296-11	SHORT 0	
JR7	1-216-296-11	SHORT 0	
JR8	1-216-296-11	SHORT 0	
JR9	1-216-295-11	SHORT 0	
JR11	1-216-296-11	SHORT 0	
JR181	1-216-295-11	SHORT 0	
JR182	1-216-295-11	SHORT 0	
JR191	1-216-295-11	SHORT 0	
JR192	1-216-295-11	SHORT 0	
JR594	1-216-295-11	SHORT 0	
JR703	1-216-295-11	SHORT 0	
JR901	1-216-295-11	SHORT 0	
JR910	1-216-296-11	SHORT 0	
		< COIL >	
L781	1-412-032-11	INDUCTOR CHIP 100uH	
		< TRANSISTOR >	
Q111	8-729-620-05	TRANSISTOR 2SC2603-EF	
Q112	8-729-620-05	TRANSISTOR 2SC2603-EF	
Q113	8-729-141-30	TRANSISTOR 2SC3623A-LK	
Q115	8-729-029-86	TRANSISTOR DTC124ESA	
Q161	8-729-620-05	TRANSISTOR 2SC2603-EF	
Q162	8-729-620-05	TRANSISTOR 2SC2603-EF	
Q163	8-729-141-30	TRANSISTOR 2SC3623A-LK	
Q165	8-729-029-86	TRANSISTOR DTC124ESA	
Q331	8-729-140-04	TRANSISTOR 2SB1116A-L	
Q332	8-729-029-86	TRANSISTOR DTC124ESA	
Q333	8-729-140-04	TRANSISTOR 2SB1116A-L	
Q334	8-729-029-86	TRANSISTOR DTC124ESA	
Q335	8-729-029-86	TRANSISTOR DTC124ESA	
Q336	8-729-116-59	TRANSISTOR 2SB1068TP	
Q339	8-729-029-86	TRANSISTOR DTC124ESA	
Q801	8-729-620-05	TRANSISTOR 2SC2603-EF	
Q802	8-729-029-40	TRANSISTOR DTA124ESA	
Q803	8-729-029-40	TRANSISTOR DTA124ESA	
Q804	8-729-029-40	TRANSISTOR DTA124ESA	
Q901	8-729-040-20	TRANSISTOR RT1P137L-TP	
Q902	8-729-029-40	TRANSISTOR DTA124ESA	
Q903	8-729-040-19	TRANSISTOR RT1N137L-TP	
Q904	8-729-029-86	TRANSISTOR DTC124ESA	
Q905	8-729-119-76	TRANSISTOR 2SA1175-HFE	
Q906	8-729-620-05	TRANSISTOR 2SC2603-EF	
Q911	8-729-040-20	TRANSISTOR RT1P137L-TP	
Q912	8-729-029-86	TRANSISTOR DTC124ESA	
Q913	8-729-040-20	TRANSISTOR RT1P137L-TP	
Q914	8-729-029-86	TRANSISTOR DTC124ESA	
Q931	8-729-040-20	TRANSISTOR RT1P137L-TP	
Q932	8-729-029-86	TRANSISTOR DTC124ESA	
Q961	8-729-620-05	TRANSISTOR 2SC2603-EF	
Q962	8-729-140-04	TRANSISTOR 2SB1116A-L	
		< RESISTOR >	
R111	1-216-833-11	METAL CHIP 10K 5% 1/16W	
R112	1-216-857-11	METAL CHIP 1M 5% 1/16W	
R113	1-216-848-11	METAL CHIP 180K 5% 1/16W	(XG80)
R113	1-216-847-11	METAL CHIP 150K 5% 1/16W	(XG700)
R114	1-216-818-11	METAL CHIP 560 5% 1/16W	
R115	1-216-841-11	METAL CHIP 47K 5% 1/16W	
R116	1-216-842-11	METAL CHIP 56K 5% 1/16W	
R117	1-216-833-11	METAL CHIP 10K 5% 1/16W	
R118	1-216-841-11	METAL CHIP 47K 5% 1/16W	
R119	1-216-825-11	METAL CHIP 2.2K 5% 1/16W	
R120	1-216-845-11	METAL CHIP 100K 5% 1/16W	
R121	1-216-833-11	METAL CHIP 10K 5% 1/16W	
R122	1-216-295-11	SHORT 0	
R123	1-216-847-11	METAL CHIP 150K 5% 1/16W	(XG700)
R123	1-216-850-11	METAL CHIP 270K 5% 1/16W	(XG80)
R124	1-216-825-11	METAL CHIP 2.2K 5% 1/16W	
R125	1-216-827-11	METAL CHIP 3.3K 5% 1/16W	
R126	1-216-825-11	METAL CHIP 2.2K 5% 1/16W	
R127	1-216-847-11	METAL CHIP 150K 5% 1/16W	(XG700)
R127	1-216-852-11	METAL CHIP 390K 5% 1/16W	(XG80)
R129	1-216-857-11	METAL CHIP 1M 5% 1/16W	
R131	1-216-809-11	METAL CHIP 100 5% 1/16W	
R132	1-216-809-11	METAL CHIP 100 5% 1/16W	
R133	1-216-809-11	METAL CHIP 100 5% 1/16W	
R161	1-216-833-11	METAL CHIP 10K 5% 1/16W	
R162	1-216-857-11	METAL CHIP 1M 5% 1/16W	

MAIN

Ref. No.	Part No.	Description			Remark
R163	1-216-847-11	METAL CHIP	150K	5%	1/16W (XG700)
R163	1-216-848-11	METAL CHIP	180K	5%	1/16W (XG80)
R164	1-216-818-11	METAL CHIP	560	5%	1/16W
R165	1-216-841-11	METAL CHIP	47K	5%	1/16W
R166	1-216-842-11	METAL CHIP	56K	5%	1/16W
R167	1-216-833-11	METAL CHIP	10K	5%	1/16W
R168	1-216-841-11	METAL CHIP	47K	5%	1/16W
R169	1-216-825-11	METAL CHIP	2.2K	5%	1/16W
R170	1-216-845-11	METAL CHIP	100K	5%	1/16W
R171	1-216-833-11	METAL CHIP	10K	5%	1/16W
R172	1-216-295-11	SHORT	0		
R173	1-216-847-11	METAL CHIP	150K	5%	1/16W (XG700)
R173	1-216-850-11	METAL CHIP	270K	5%	1/16W (XG80)
R174	1-216-833-11	METAL CHIP	10K	5%	1/16W
R175	1-216-845-11	METAL CHIP	100K	5%	1/16W
R177	1-216-847-11	METAL CHIP	150K	5%	1/16W (XG700)
R177	1-216-852-11	METAL CHIP	390K	5%	1/16W (XG80)
R178	1-216-825-11	METAL CHIP	2.2K	5%	1/16W
R179	1-216-857-11	METAL CHIP	1M	5%	1/16W
R301	1-216-839-11	METAL CHIP	33K	5%	1/16W
R302	1-216-825-11	METAL CHIP	2.2K	5%	1/16W
R303	1-216-809-11	METAL CHIP	100	5%	1/16W
R304	1-216-809-11	METAL CHIP	100	5%	1/16W
R305	1-216-825-11	METAL CHIP	2.2K	5%	1/16W
R306	1-216-832-11	METAL CHIP	8.2K	5%	1/16W
R307	1-216-832-11	METAL CHIP	8.2K	5%	1/16W
R308	1-216-829-11	METAL CHIP	4.7K	5%	1/16W
R309	1-216-837-11	METAL CHIP	22K	5%	1/16W
R311	1-216-857-11	METAL CHIP	1M	5%	1/16W
R312	1-218-900-11	METAL CHIP	160K	0.5%	1/16W
R313	1-216-845-11	METAL CHIP	100K	5%	1/16W
R315	1-216-833-11	METAL CHIP	10K	5%	1/16W
R316	1-216-836-11	METAL CHIP	18K	5%	1/16W
R317	1-216-833-11	METAL CHIP	10K	5%	1/16W
R318	1-216-833-11	METAL CHIP	10K	5%	1/16W
R319	1-216-852-11	METAL CHIP	390K	5%	1/16W
R321	1-216-826-11	METAL CHIP	2.7K	5%	1/16W
R322	1-216-832-11	METAL CHIP	8.2K	5%	1/16W
R332	1-216-819-11	METAL CHIP	680	5%	1/16W
R333	1-216-825-11	METAL CHIP	2.2K	5%	1/16W
R334	1-216-819-11	METAL CHIP	680	5%	1/16W
R335	1-216-825-11	METAL CHIP	2.2K	5%	1/16W
R340	1-216-841-11	METAL CHIP	47K	5%	1/16W
R343	1-216-061-11	METAL CHIP	3.3K	5%	1/10W
R344	1-216-061-11	METAL CHIP	3.3K	5%	1/10W
R345	1-216-061-11	METAL CHIP	3.3K	5%	1/10W
R351	1-216-839-11	METAL CHIP	33K	5%	1/16W
R352	1-216-825-11	METAL CHIP	2.2K	5%	1/16W
R353	1-216-809-11	METAL CHIP	100	5%	1/16W
R354	1-216-809-11	METAL CHIP	100	5%	1/16W
R355	1-216-825-11	METAL CHIP	2.2K	5%	1/16W
R356	1-216-832-11	METAL CHIP	8.2K	5%	1/16W
R357	1-216-832-11	METAL CHIP	8.2K	5%	1/16W
R358	1-216-829-11	METAL CHIP	4.7K	5%	1/16W
R359	1-216-839-11	METAL CHIP	33K	5%	1/16W
R371	1-216-841-11	METAL CHIP	47K	5%	1/16W
R372	1-216-829-11	METAL CHIP	4.7K	5%	1/16W
R373	1-216-821-11	METAL CHIP	1K	5%	1/16W
R374	1-216-841-11	METAL CHIP	47K	5%	1/16W
R375	1-218-892-11	METAL CHIP	75K	0.5%	1/16W
R376	1-216-829-11	METAL CHIP	4.7K	5%	1/16W
R377	1-216-841-11	METAL CHIP	47K	5%	1/16W
R378	1-218-892-11	METAL CHIP	75K	0.5%	1/16W
R401	1-216-809-11	METAL CHIP	100	5%	1/16W
R402	1-216-827-11	METAL CHIP	3.3K	5%	1/16W
R413	1-216-295-11	SHORT	0		
R414	1-216-295-11	SHORT	0		
R451	1-216-809-11	METAL CHIP	100	5%	1/16W
R452	1-216-827-11	METAL CHIP	3.3K	5%	1/16W
R501	1-216-809-11	METAL CHIP	100	5%	1/16W
R503	1-216-809-11	METAL CHIP	100	5%	1/16W
R505	1-216-809-11	METAL CHIP	100	5%	1/16W
R511	1-216-851-11	METAL CHIP	330K	5%	1/16W
R513	1-216-295-11	SHORT	0		
R517	1-216-833-11	METAL CHIP	10K	5%	1/16W
R518	1-216-809-11	METAL CHIP	100	5%	1/16W
R519	1-216-809-11	METAL CHIP	100	5%	1/16W
R520	1-216-809-11	METAL CHIP	100	5%	1/16W (XG700)
R521	1-216-809-11	METAL CHIP	100	5%	1/16W (XG700)
R522	1-216-829-11	METAL CHIP	4.7K	5%	1/16W
R526	1-216-829-11	METAL CHIP	4.7K	5%	1/16W
R527	1-216-809-11	METAL CHIP	100	5%	1/16W
R528	1-216-809-11	METAL CHIP	100	5%	1/16W
R529	1-216-809-11	METAL CHIP	100	5%	1/16W
R530	1-216-809-11	METAL CHIP	100	5%	1/16W
R532	1-216-809-11	METAL CHIP	100	5%	1/16W
R533	1-216-809-11	METAL CHIP	100	5%	1/16W
R535	1-216-809-11	METAL CHIP	100	5%	1/16W
R536	1-216-809-11	METAL CHIP	100	5%	1/16W
R537	1-216-809-11	METAL CHIP	100	5%	1/16W
R538	1-216-809-11	METAL CHIP	100	5%	1/16W
R540	1-216-827-11	METAL CHIP	3.3K	5%	1/16W
R541	1-216-833-11	METAL CHIP	10K	5%	1/16W
R542	1-216-809-11	METAL CHIP	100	5%	1/16W
R543	1-216-809-11	METAL CHIP	100	5%	1/16W
R545	1-216-809-11	METAL CHIP	100	5%	1/16W
R546	1-216-809-11	METAL CHIP	100	5%	1/16W
R547	1-216-809-11	METAL CHIP	100	5%	1/16W
R548	1-216-809-11	METAL CHIP	100	5%	1/16W
R549	1-216-809-11	METAL CHIP	100	5%	1/16W
R550	1-216-809-11	METAL CHIP	100	5%	1/16W
R551	1-216-809-11	METAL CHIP	100	5%	1/16W
R552	1-216-809-11	METAL CHIP	100	5%	1/16W
R553	1-216-809-11	METAL CHIP	100	5%	1/16W
R554	1-216-809-11	METAL CHIP	100	5%	1/16W
R555	1-216-809-11	METAL CHIP	100	5%	1/16W
R556	1-216-809-11	METAL CHIP	100	5%	1/16W
R557	1-246-041-00	METAL CHIP	470	5%	1/10W
R558	1-216-809-11	METAL CHIP	100	5%	1/16W

MAIN

Ref. No.	Part No.	Description			Remark
R559	1-216-809-11	METAL CHIP	100	5%	1/16W
R561	1-216-809-11	METAL CHIP	100	5%	1/16W
R563	1-216-809-11	METAL CHIP	100	5%	1/16W
R565	1-216-809-11	METAL CHIP	100	5%	1/16W
R567	1-216-833-11	METAL CHIP	10K	5%	1/16W
R568	1-216-809-11	METAL CHIP	100	5%	1/16W
R569	1-216-809-11	METAL CHIP	100	5%	1/16W
R570	1-216-841-11	METAL CHIP	47K	5%	1/16W
R572	1-216-809-11	METAL CHIP	100	5%	1/16W
R573	1-216-809-11	METAL CHIP	100	5%	1/16W
R574	1-216-809-11	METAL CHIP	100	5%	1/16W
R575	1-216-809-11	METAL CHIP	100	5%	1/16W
R576	1-216-809-11	METAL CHIP	100	5%	1/16W
R577	1-216-809-11	METAL CHIP	100	5%	1/16W
R578	1-216-809-11	METAL CHIP	100	5%	1/16W
R579	1-216-809-11	METAL CHIP	100	5%	1/16W
R580	1-216-809-11	METAL CHIP	100	5%	1/16W
R581	1-216-809-11	METAL CHIP	100	5%	1/16W
R582	1-216-809-11	METAL CHIP	100	5%	1/16W
R583	1-216-809-11	METAL CHIP	100	5%	1/16W
R584	1-216-809-11	METAL CHIP	100	5%	1/16W
R585	1-216-809-11	METAL CHIP	100	5%	1/16W
R586	1-216-809-11	METAL CHIP	100	5%	1/16W
R587	1-216-809-11	METAL CHIP	100	5%	1/16W
R588	1-216-809-11	METAL CHIP	100	5%	1/16W
R589	1-216-809-11	METAL CHIP	100	5%	1/16W
R590	1-216-809-11	METAL CHIP	100	5%	1/16W
R591	1-216-809-11	METAL CHIP	100	5%	1/16W
R593	1-216-809-11	METAL CHIP	100	5%	1/16W
R594	1-216-831-11	METAL CHIP	6.8K	5%	1/16W
R595	1-216-841-11	METAL CHIP	47K	5%	1/16W
R596	1-216-831-11	METAL CHIP	6.8K	5%	1/16W (AEP, UK)
R596	1-216-837-11	METAL CHIP	22K	5%	1/16W (E2, MX, AR)
R596	1-216-841-11	METAL CHIP	47K	5%	1/16W (EA, SP)
R597	1-216-827-11	METAL CHIP	3.3K	5%	1/16W (SP)
R597	1-216-839-11	METAL CHIP	33K	5%	1/16W (EA)
R597	1-216-841-11	METAL CHIP	47K	5%	1/16W (EXCEPT EA, SP)
R600	1-216-809-11	METAL CHIP	100	5%	1/16W
R601	1-216-821-11	METAL CHIP	1K	5%	1/16W
R602	1-216-821-11	METAL CHIP	1K	5%	1/16W
R603	1-216-841-11	METAL CHIP	47K	5%	1/16W
R604	1-216-820-11	METAL CHIP	820	5%	1/16W (XG700)
R604	1-216-821-11	METAL CHIP	1K	5%	1/16W (XG80)
R605	1-216-854-11	METAL CHIP	560K	5%	1/16W
R606	1-216-841-11	METAL CHIP	47K	5%	1/16W
R607	1-216-821-11	METAL CHIP	1K	5%	1/16W
R608	1-216-845-11	METAL CHIP	100K	5%	1/16W
R609	1-216-813-11	METAL CHIP	220	5%	1/16W
R651	1-216-821-11	METAL CHIP	1K	5%	1/16W
R652	1-216-821-11	METAL CHIP	1K	5%	1/16W
R653	1-216-841-11	METAL CHIP	47K	5%	1/16W
R654	1-216-820-11	METAL CHIP	820	5%	1/16W (XG700)
R654	1-216-821-11	METAL CHIP	1K	5%	1/16W (XG80)
R655	1-216-854-11	METAL CHIP	560K	5%	1/16W
R656	1-216-841-11	METAL CHIP	47K	5%	1/16W
R657	1-216-821-11	METAL CHIP	1K	5%	1/16W
R658	1-216-845-11	METAL CHIP	100K	5%	1/16W
R659	1-216-813-11	METAL CHIP	220	5%	1/16W
R701	1-216-821-11	METAL CHIP	1K	5%	1/16W
R702	1-216-845-11	METAL CHIP	100K	5%	1/16W
R703	1-216-821-11	METAL CHIP	1K	5%	1/16W
R704	1-216-845-11	METAL CHIP	100K	5%	1/16W
R705	1-216-821-11	METAL CHIP	1K	5%	1/16W
R706	1-216-845-11	METAL CHIP	100K	5%	1/16W
R707	1-216-821-11	METAL CHIP	1K	5%	1/16W (AEP, UK, MX)
R708	1-216-821-11	METAL CHIP	1K	5%	1/16W (AEP, UK, MX)
R709	1-216-821-11	METAL CHIP	1K	5%	1/16W (AEP, UK, MX)
R710	1-216-821-11	METAL CHIP	1K	5%	1/16W (AEP, UK, MX)
R717	1-216-845-11	METAL CHIP	100K	5%	1/16W (AEP, UK, MX)
R718	1-216-845-11	METAL CHIP	100K	5%	1/16W (AEP, UK, MX)
R721	1-211-990-11	METAL CHIP	75	0.5%	1/16W
R722	1-216-804-11	METAL CHIP	39	5%	1/16W
R724	1-216-833-11	METAL CHIP	10K	5%	1/16W
R751	1-216-821-11	METAL CHIP	1K	5%	1/16W
R752	1-216-845-11	METAL CHIP	100K	5%	1/16W
R753	1-216-821-11	METAL CHIP	1K	5%	1/16W
R754	1-216-845-11	METAL CHIP	100K	5%	1/16W
R755	1-216-821-11	METAL CHIP	1K	5%	1/16W
R756	1-216-845-11	METAL CHIP	100K	5%	1/16W
R801	1-216-821-11	METAL CHIP	1K	5%	1/16W
R802	1-216-829-11	METAL CHIP	4.7K	5%	1/16W
R803	1-216-809-11	METAL CHIP	100	5%	1/16W
R804	1-216-841-11	METAL CHIP	47K	5%	1/16W
R805	1-216-841-11	METAL CHIP	47K	5%	1/16W
R806	1-216-833-11	METAL CHIP	10K	5%	1/16W
R807	1-216-833-11	METAL CHIP	10K	5%	1/16W
R808	1-216-821-11	METAL CHIP	1K	5%	1/16W
R809	1-216-845-11	METAL CHIP	100K	5%	1/16W
R810	1-216-813-11	METAL CHIP	220	5%	1/16W
R811	1-216-845-11	METAL CHIP	100K	5%	1/16W
R901	1-216-829-11	METAL CHIP	4.7K	5%	1/16W
R902	1-216-837-11	METAL CHIP	22K	5%	1/16W
R903	1-216-821-11	METAL CHIP	1K	5%	1/16W
R904	1-216-833-11	METAL CHIP	10K	5%	1/16W
R961	1-216-829-11	METAL CHIP	4.7K	5%	1/16W
R962	1-216-837-11	METAL CHIP	22K	5%	1/16W
R963	1-216-825-11	METAL CHIP	2.2K	5%	1/16W
		< VARIABLE RESISTOR >			
RV301	1-238-600-11	RES, ADJ, CARBON 10K			

MAIN **MIC** **PA**

Ref. No.	Part No.	Description			Remark
RV351	1-238-600-11	RES, ADJ, CARBON 10K			
		< VIBRATOR >			
X501	1-567-098-41	VIBRATOR, CRYSTAL (32.768kHz)			
X502	1-781-107-21	VIBRATOR, SERAMIC (16MHz)			

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Ref. No.	Part No.	Description			Remark
	A-4475-552-A	MIC BOARD, COMPLETE			
		*******************			
		< CAPACITOR >			
C801	1-162-306-11	CERAMIC	0.01uF	30%	16V
C802	1-162-215-31	CERAMIC	47PF	5%	50V
C803	1-126-960-11	ELECT	1uF	20%	50V
C804	1-126-959-11	ELECT	0.47uF	20%	50V
C805	1-162-294-31	CERAMIC	0.001uF	10%	50V
C806	1-162-215-31	CERAMIC	47PF	5%	50V
C810	1-162-286-21	CERAMIC	220PF	10%	50V
C813	1-137-372-11	MYLAR	0.022uF	5%	50V
C814	1-162-215-31	CERAMIC	47PF	5%	50V
C815	1-162-215-31	CERAMIC	47PF	5%	50V
C816	1-126-961-11	ELECT	2.2uF	20%	50V
C817	1-126-961-11	ELECT	2.2uF	20%	50V
C818	1-162-215-31	CERAMIC	47PF	5%	50V
C819	1-162-215-31	CERAMIC	47PF	5%	50V
C821	1-104-664-11	ELECT	47uF	20%	16V
C822	1-104-664-11	ELECT	47uF	20%	16V
C836	1-162-306-11	CERAMIC	0.01uF	30%	16V
C880	1-126-961-11	ELECT	2.2uF	20%	50V
C881	1-162-215-31	CERAMIC	47PF	5%	50V
C882	1-162-215-31	CERAMIC	47PF	5%	50V
C884	1-126-961-11	ELECT	2.2uF	20%	50V
		< CONNECTOR >			
CN811	1-785-316-11	PIN, CONNECTOR (STRAIGHT) 4P			
CN812	1-785-318-11	PIN, CONNECTOR (STRAIGHT) 6P			
		< NOISE FILTER >			
FL801	1-424-228-11	FILTER, NOISE			
		< IC >			
IC850	8-759-700-08	IC NJM4558S			
IC852	8-759-700-08	IC NJM4558S			
IC853	8-759-700-08	IC NJM4558S			
		< JACK >			
J801	1-770-226-11	JACK (LARGE TYPE) (MIX MIC)			
J802	1-770-226-11	JACK (LARGE TYPE) (GUITAR)			
		< TRANSISTOR >			
Q880	8-729-620-05	TRANSISTOR	2SC2603-EF		
Q881	8-729-029-86	TRANSISTOR	DTC124ESA		
Q882	8-729-029-86	TRANSISTOR	DTC124ESA		
Q883	8-729-029-40	TRANSISTOR	DTA124ESA		
		< RESISTOR >			
R806	1-247-903-00	CARBON	1M	5%	1/4W
R807	1-249-429-11	CARBON	10K	5%	1/4W
R809	1-249-417-11	CARBON	1K	5%	1/4W
R850	1-249-417-11	CARBON	1K	5%	1/4W
R852	1-249-441-11	CARBON	100K	5%	1/4W
R853	1-249-417-11	CARBON	1K	5%	1/4W
R854	1-249-437-11	CARBON	47K	5%	1/4W
R855	1-249-429-11	CARBON	10K	5%	1/4W
R856	1-247-899-00	CARBON	680K	5%	1/4W
R857	1-249-425-11	CARBON	4.7K	5%	1/4W
R869	1-247-875-11	CARBON	68K	5%	1/4W
R870	1-247-887-00	CARBON	220K	5%	1/4W
R872	1-249-421-11	CARBON	2.2K	5%	1/4W
R873	1-247-839-11	CARBON	2.2K	5%	1/4W
R874	1-249-431-11	CARBON	15K	5%	1/4W
R880	1-247-855-11	CARBON	10K	5%	1/4W
R881	1-247-871-11	CARBON	47K	5%	1/4W
R882	1-249-437-11	CARBON	47K	5%	1/4W
R883	1-249-437-11	CARBON	47K	5%	1/4W
R884	1-247-823-11	CARBON	470	5%	1/4W
R885	1-249-429-11	CARBON	10K	5%	1/4W
R886	1-247-893-11	CARBON	390K	5%	1/4W
R887	1-249-429-11	CARBON	10K	5%	1/4W
R888	1-249-417-11	CARBON	1K	5%	1/4W
R891	1-247-903-00	CARBON	1M	5%	1/4W

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Ref. No.	Part No.	Description			Remark
	A-4475-583-A	PA BOARD, COMPLETE (E2, MX, AR)			
	A-4475-591-A	PA BOARD, COMPLETE (AEP, UK)			
	A-4476-049-A	PA BOARD, COMPLETE (EA, SP)			
		******************			
	4-875-327-31	HEAT SINK			
		< CAPACITOR >			
C401	1-126-963-11	ELECT	4.7uF	20%	50V
C402	1-164-159-21	CERAMIC	0.1uF		50V (XG700)
C403	1-164-159-21	CERAMIC	0.1uF		50V (XG700)
C404	1-164-159-21	CERAMIC	0.1uF		50V (XG700)
C405	1-164-159-21	CERAMIC	0.1uF		50V (XG700)
C412	1-162-306-11	CERAMIC	0.01uF	20%	16V
C413	1-162-306-11	CERAMIC	0.01uF	20%	16V
C432	1-126-933-11	ELECT	100uF	20%	16V
C433	1-126-961-11	ELECT	2.2uF	20%	50V (XG700)
C433	1-126-962-11	ELECT	3.3uF	20%	50V (XG80)
C801	1-128-582-11	ELECT	10uF	20%	100V
C802	1-162-290-31	CERAMIC	470PF	10%	50V
C803	1-162-286-21	CERAMIC	220PF	10%	50V
C804	1-126-967-11	ELECT	47uF	20%	50V
C807	1-128-560-11	ELECT	22uF	20%	100V
C808	1-130-777-00	MYLAR	0.1uF	10%	100V
C809	1-130-777-00	MYLAR	0.1uF	10%	100V
C810	1-128-562-11	ELECT	47uF	20%	100V (XG80)
C810	1-128-578-11	ELECT	1uF	20%	100V (XG700)

PA

Ref. No.	Part No.	Description				Remark
C811	1-130-491-00	MYLAR	0.047uF	5%	50V	
C812	1-130-491-00	MYLAR	0.047uF	5%	50V	
C813	1-162-306-11	CERAMIC	0.01uF	20%	16V	
C814	1-162-294-31	CERAMIC	0.001uF	10%	50V	
C815	1-126-959-11	ELECT	0.47uF	20%	50V	
C830	1-107-714-11	ELECT	10uF	20%	50V	
C831	1-126-964-11	ELECT	10uF	20%	50V	
C832	1-126-967-11	ELECT	47uF	20%	50V	
C841	1-127-812-11	ELECT	3300uF	20%	63V	(E2, MX, AR)
C841	1-135-516-11	ELECT	3300uF	20%	63V	(AEP, UK, EA, SP)
C842	1-127-755-11	ELECT	3300uF	20%	100V	(AEP, UK, EA, SP)
C842	1-127-815-11	ELECT	3300uF	20%	100V	(E2, MX, AR)
C844	1-130-777-00	MYLAR	0.1uF	10%	100V	
C845	1-126-943-11	ELECT	2200uF	20%	25V	
C847	1-164-159-21	CERAMIC	0.1uF		50V	
C848	1-164-159-21	CERAMIC	0.1uF		50V	
C849	1-164-159-21	CERAMIC	0.1uF		50V	
C850	1-107-721-11	ELECT	4.7uF	20%	100V	
C851	1-128-582-11	ELECT	10uF	20%	100V	
C852	1-162-290-31	CERAMIC	470PF	10%	50V	
C853	1-162-286-21	CERAMIC	220PF	10%	50V	
C854	1-126-967-11	ELECT	47uF	20%	50V	
C857	1-128-560-11	ELECT	22uF	20%	100V	
C858	1-164-159-21	CERAMIC	0.1uF		50V	
C859	1-164-159-21	CERAMIC	0.1uF		50V	
C861	1-130-491-00	MYLAR	0.047uF	5%	50V	
C862	1-130-491-00	MYLAR	0.047uF	5%	50V	
C863	1-126-961-11	ELECT	2.2uF	20%	50V	
C891	1-127-812-11	ELECT	3300uF	20%	63V	(E2, MX, AR)
C891	1-135-516-11	ELECT	3300uF	20%	63V	(AEP, UK, EA, SP)
C892	1-127-755-11	ELECT	3300uF	20%	100V	(AEP, UK, EA, SP)
C892	1-127-815-11	ELECT	3300uF	20%	100V	(E2, MX, AR)
C894	1-130-777-00	MYLAR	0.1uF	10%	100V	
C895	1-107-721-11	ELECT	4.7uF	20%	100V	
C902	1-164-159-21	CERAMIC	0.1uF		50V	
C903	1-126-933-11	ELECT	100uF	20%	16V	
C904	1-126-964-11	ELECT	10uF	20%	50V	
C905	1-126-968-11	ELECT	100uF	20%	50V	
C906	1-126-943-11	ELECT	2200uF	20%	25V	
C909	1-164-159-21	CERAMIC	0.1uF		50V	
C910	1-104-664-11	ELECT	47uF	20%	16V	
		< CONNECTOR >				
CN803	1-778-981-21	CONNECTOR, BOARD TO BOARD 13P				
CN804	1-778-981-21	CONNECTOR, BOARD TO BOARD 13P				
CN904	1-785-316-11	PIN, CONNECTOR (STRAIGHT) 4P				
		< DIODE >				
D401	8-719-991-33	DIODE 1SS133T-77				
D402	8-719-991-33	DIODE 1SS133T-77				
D405	8-719-991-33	DIODE 1SS133T-77				

Ref. No.	Part No.	Description		Remark
D406	8-719-991-33	DIODE	1SS133T-77	
D801	8-719-991-33	DIODE	1SS133T-77	
D802	8-719-110-49	DIODE	RD18ESB2	
D803	8-719-991-33	DIODE	1SS133T-77	
D804	8-719-991-33	DIODE	1SS133T-77	
D805	8-719-991-33	DIODE	1SS133T-77	
D831	8-719-060-53	DIODE	RBV-2506	
D833	8-719-200-82	DIODE	11ES2	
D834	8-719-200-82	DIODE	11ES2	
D835	8-719-200-82	DIODE	11ES2	
D836	8-719-200-82	DIODE	11ES2	
D841	8-719-200-82	DIODE	11ES2	
D842	8-719-200-82	DIODE	11ES2	
D843	8-719-200-82	DIODE	11ES2	
D844	8-719-200-82	DIODE	11ES2	
D851	8-719-991-33	DIODE	1SS133T-77	
D852	8-719-110-49	DIODE	RD18ESB2	
D853	8-719-991-33	DIODE	1SS133T-77	
D902	8-719-210-21	DIODE	11EQS04	
D903	8-719-210-21	DIODE	11EQS04	
D904	8-719-210-21	DIODE	11EQS04	
D905	8-719-210-21	DIODE	11EQS04	
D906	8-719-991-33	DIODE	1SS133T-77	
D911	8-719-982-37	DIODE	MTZJ-39C	
D912	8-719-109-89	DIODE	RD5.6ESB2	
		< IC >		
IC801	8-749-017-06	IC	STK412-150 (XG700)	
IC801	8-749-017-07	IC	STK412-170 (XG80)	
IC901	8-759-450-47	IC	BA05T	
		< COIL >		
L401	1-420-872-00	COIL, AIR-CORE (XG700)		
L402	1-420-872-00	COIL, AIR-CORE (XG700)		
		< TRANSISTOR >		
Q401	8-729-029-40	TRANSISTOR	DTA124ESA-TP	
Q402	8-729-140-84	TRANSISTOR	2SC1841-PAFAEA	
Q431	8-729-140-84	TRANSISTOR	2SC1841-PAFAEA	
Q432	8-729-119-76	TRANSISTOR	2SA1175-HFE	
Q433	8-729-620-05	TRANSISTOR	2SC2603-EF	
Q434	8-729-620-05	TRANSISTOR	2SC2603-EF	
Q437	8-729-620-05	TRANSISTOR	2SC2603-EF	
Q439	8-729-620-05	TRANSISTOR	2SC2603-EF	
Q801	8-729-140-84	TRANSISTOR	2SC1841-PAFAEA	
Q803	8-729-140-82	TRANSISTOR	2SA988-PAFAEA	
Q804	8-729-140-84	TRANSISTOR	2SC1841-PAFAEA	
Q805	8-729-231-55	TRANSISTOR	2SC2878-AB	
Q831	8-729-029-86	TRANSISTOR	DTC124ESA	
Q832	8-729-620-05	TRANSISTOR	2SC2603-EF	
Q833	8-729-029-40	TRANSISTOR	DTA124ESA	
Q834	8-729-140-84	TRANSISTOR	2SC1841-PAFAEA	
Q851	8-729-140-84	TRANSISTOR	2SC1841-PAFAEA	
Q855	8-729-231-55	TRANSISTOR	2SC2878-AB	
Q901	8-729-620-05	TRANSISTOR	2SC2603-EF	
Q903	8-729-141-83	TRANSISTOR	2SB1094-LK	
Q908	8-729-119-76	TRANSISTOR	2SA1175-HFE	

PA

Ref. No.	Part No.	Description			Remark
		< RESISTOR >			
⚠R401	1-215-867-00	METAL OXIDE	470	5%	1W F (XG80)
⚠R401	1-215-868-00	METAL OXIDE	680	5%	1W F (XG700)
R406	1-249-437-11	CARBON	47K	5%	1/4W
R407	1-249-437-11	CARBON	47K	5%	1/4W
R410	1-249-389-11	CARBON	4.7	5%	1/4W (XG700)
R411	1-249-389-11	CARBON	4.7	5%	1/4W (XG700)
R412	1-249-389-11	CARBON	4.7	5%	1/4W (XG700)
R413	1-249-389-11	CARBON	4.7	5%	1/4W (XG700)
R414	1-260-076-11	CARBON	10	5%	1/2W (XG700)
R415	1-260-076-11	CARBON	10	5%	1/2W (XG700)
R429	1-249-437-11	CARBON	47K	5%	1/4W
R431	1-249-438-11	CARBON	56K	5%	1/4W
R432	1-249-437-11	CARBON	47K	5%	1/4W
R434	1-249-433-11	CARBON	22K	5%	1/4W
R437	1-249-429-11	CARBON	10K	5%	1/4W
R439	1-249-425-11	CARBON	4.7K	5%	1/4W
R440	1-249-433-11	CARBON	22K	5%	1/4W (XG80)
R440	1-249-437-11	CARBON	47K	5%	1/4W (XG700)
R441	1-249-435-11	CARBON	33K	5%	1/4W
R446	1-249-429-11	CARBON	10K	5%	1/4W
R447	1-249-437-11	CARBON	47K	5%	1/4W
R801	1-249-417-11	CARBON	1K	5%	1/4W
R802	1-249-437-11	CARBON	47K	5%	1/4W
R803	1-249-412-11	CARBON	390	5%	1/4W
R804	1-249-435-11	CARBON	33K	5%	1/4W
⚠R805	1-216-436-00	METAL OXIDE	3.9K	5%	1W F
⚠R806	1-216-436-00	METAL OXIDE	3.9K	5%	1W F
⚠R807	1-212-881-11	FUSIBLE	100	5%	1/4W F
⚠R808	1-214-789-00	METAL	0.1	10%	5W F
R809	1-260-076-11	CARBON	10	5%	1/2W
R810	1-249-437-11	CARBON	47K	5%	1/4W
R811	1-249-417-11	CARBON	1K	5%	1/4W
R812	1-249-431-11	CARBON	15K	5%	1/4W
R813	1-249-441-11	CARBON	100K	5%	1/4W
R814	1-249-421-11	CARBON	2.2K	5%	1/4W
R815	1-249-433-11	CARBON	22K	5%	1/4W
R816	1-249-429-11	CARBON	10K	5%	1/4W
R817	1-249-421-11	CARBON	2.2K	5%	1/4W
R818	1-249-409-11	CARBON	220	5%	1/4W
R819	1-249-439-11	CARBON	68K	5%	1/4W
⚠R820	1-202-972-61	FUSIBLE	1	5%	1/4W F
R821	1-249-435-11	CARBON	33K	5%	1/4W
R822	1-249-433-11	CARBON	22K	5%	1/4W
R823	1-249-433-11	CARBON	22K	5%	1/4W
R824	1-249-418-11	CARBON	1.2K	5%	1/4W
⚠R825	1-215-891-11	METAL OXIDE	680	5%	2W F
R827	1-249-441-11	CARBON	100K	5%	1/4W
R828	1-247-903-00	CARBON	1M	5%	1/4W
R831	1-249-441-11	CARBON	100K	5%	1/4W
R832	1-249-441-11	CARBON	100K	5%	1/4W
R833	1-247-856-00	CARBON	11K	5%	1/4W (XG80)
R833	1-249-429-11	CARBON	10K	5%	1/4W (XG700)
R834	1-249-429-11	CARBON	10K	5%	1/4W
R835	1-249-437-11	CARBON	47K	5%	1/4W
R836	1-249-417-11	CARBON	1K	5%	1/4W
R837	1-249-435-11	CARBON	33K	5%	1/4W
R838	1-249-435-11	CARBON	33K	5%	1/4W
R839	1-249-441-11	CARBON	100K	5%	1/4W
R840	1-249-402-11	CARBON	56	5%	1/4W
R851	1-249-417-11	CARBON	1K	5%	1/4W
R852	1-249-437-11	CARBON	47K	5%	1/4W
R853	1-249-412-11	CARBON	390	5%	1/4W
⚠R855	1-215-891-11	METAL OXIDE	680	5%	2W F
⚠R857	1-212-881-11	FUSIBLE	100	5%	1/4W F
⚠R858	1-214-789-00	METAL	0.1	10%	5W F
R859	1-260-076-11	CARBON	10	5%	1/2W
R860	1-249-437-11	CARBON	47K	5%	1/4W
R861	1-249-417-11	CARBON	1K	5%	1/4W
R862	1-249-431-11	CARBON	15K	5%	1/4W
R863	1-249-441-11	CARBON	100K	5%	1/4W
R864	1-249-425-11	CARBON	4.7K	5%	1/4W
R865	1-249-433-11	CARBON	22K	5%	1/4W
R868	1-249-409-11	CARBON	220	5%	1/4W
R880	1-249-402-11	CARBON	56	5%	1/4W
⚠R888	1-214-789-00	METAL	0.1	10%	5W F
R889	1-249-441-11	CARBON	100K	5%	1/4W
⚠R898	1-214-789-00	METAL	0.1	10%	5W F
R901	1-249-429-11	CARBON	10K	5%	1/4W
R902	1-249-441-11	CARBON	100K	5%	1/4W
R903	1-249-429-11	CARBON	10K	5%	1/4W
R904	1-249-417-11	CARBON	1K	5%	1/4W
R905	1-249-429-11	CARBON	10K	5%	1/4W
R906	1-247-807-31	CARBON	100	5%	1/4W
R907	1-247-807-31	CARBON	100	5%	1/4W
R915	1-247-791-91	CARBON	22	5%	1/4W
⚠R916	1-215-890-11	METAL OXIDE	470	5%	2W F (XG80)
⚠R916	1-216-454-11	METAL OXIDE	390	5%	2W F (XG700)
		< RELAY >			
RY401	1-515-920-11	RELAY			
		< THERMISTOR >			
TH831	1-807-796-11	THERMISTOR			
		< TERMINAL >			
TM401	1-537-925-61	TERMINAL BOARD (FRONT SPEAKER)			

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The components identified by mark ⚠ or dotted line with mark ⚠ are critical for safety.
Replace only with part number specified.

PANEL FL

Ref. No.	Part No.	Description			Remark
	A-4475-589-A	PANEL FL BOARD, COMPLETE			
		************************			
	4-225-511-01	HOLDER FL TUBE			
*	4-949-935-81	CUSHION (FL)			
		< CAPACITOR >			
C601	1-104-664-11	ELECT	47uF	20%	16V
C602	1-162-306-11	CERAMIC	0.01uF	30%	16V
C603	1-162-306-11	CERAMIC	0.01uF	30%	16V
C604	1-162-294-31	CERAMIC	0.001uF	10%	50V
C605	1-164-159-21	CERAMIC	0.1uF		50V
C607	1-104-664-11	ELECT	47uF	20%	16V
C641	1-126-964-11	ELECT	10uF	20%	50V
C642	1-126-964-11	ELECT	10uF	20%	50V
C643	1-162-303-11	CERAMIC	0.0033uF	30%	16V
C644	1-126-964-11	ELECT	10uF	20%	50V
C645	1-104-664-11	ELECT	47uF	20%	16V
C646	1-162-306-11	CERAMIC	0.01uF	30%	16V
C647	1-126-963-11	ELECT	4.7uF	20%	50V
C648	1-126-960-11	ELECT	1uF	20%	50V
C649	1-126-960-11	ELECT	1uF	20%	50V
		< CONNECTOR >			
CN601	1-784-774-11	CONNECTOR, FFC 13P			
CN602	1-568-838-11	SOCKET, CONNECTOR 21P			
		< DIODE >			
D601	8-719-058-04	LED SEL5223S-TP15 (I/⏻)			
D602	8-719-050-84	DIODE RB441Q-40T-77			
D603	8-719-991-33	DIODE 1SS133T-77			
		< FLUORESCENT INDICATOR TUBE >			
FL601	1-517-940-11	INDICATOR TUBE, FLUORESCENT			
		< IC >			
IC601	8-759-829-28	IC TMP88CP76F-1B71			
IC602	8-759-083-77	IC BA3830F			
		< COIL >			
L601	1-410-509-11	INDUCTOR	10uH		
L602	1-410-509-11	INDUCTOR	10uH		
L603	1-410-509-11	INDUCTOR	10uH		
		< NOISE FILTER >			
LF601	1-424-228-11	FILTER, NOISE			
		< TRANSISTOR >			
Q601	8-729-029-86	TRANSISTOR	DTC124ESA		
Q602	8-729-140-04	TRANSISTOR	2SB1116A-L		
Q603	8-729-140-04	TRANSISTOR	2SB1116A-L		
Q604	8-729-620-05	TRANSISTOR	2SC2603-EF		
Q605	8-729-047-58	TRANSISTOR	DTC114TLTL2		
Q606	8-729-047-58	TRANSISTOR	DTC114TLTL2		
Q607	8-729-047-58	TRANSISTOR	DTC114TLTL2		

Ref. No.	Part No.	Description			Remark
		< RESISTOR >			
R601	1-249-429-11	CARBON	10K	5%	1/4W
R602	1-249-437-11	CARBON	47K	5%	1/4W
R603	1-247-807-31	CARBON	100	5%	1/4W
R604	1-249-437-11	CARBON	47K	5%	1/4W
R605	1-247-807-31	CARBON	100	5%	1/4W
R606	1-247-807-31	CARBON	100	5%	1/4W
R607	1-247-807-31	CARBON	100	5%	1/4W
R608	1-249-429-11	CARBON	10K	5%	1/4W
R609	1-249-429-11	CARBON	10K	5%	1/4W
R610	1-249-429-11	CARBON	10K	5%	1/4W
R611	1-249-429-11	CARBON	10K	5%	1/4W
R612	1-249-429-11	CARBON	10K	5%	1/4W
R613	1-249-429-11	CARBON	10K	5%	1/4W
R614	1-249-429-11	CARBON	10K	5%	1/4W
R615	1-249-410-11	CARBON	270	5%	1/4W
R616	1-249-410-11	CARBON	270	5%	1/4W
R617	1-247-903-00	CARBON	1M	5%	1/4W
R618	1-247-807-31	CARBON	100	5%	1/4W
R619	1-249-429-11	CARBON	10K	5%	1/4W
R620	1-249-429-11	CARBON	10K	5%	1/4W
R621	1-247-807-31	CARBON	100	5%	1/4W
R622	1-249-429-11	CARBON	10K	5%	1/4W
R623	1-247-807-31	CARBON	100	5%	1/4W
R624	1-249-429-11	CARBON	10K	5%	1/4W
R625	1-247-807-31	CARBON	100	5%	1/4W
R626	1-249-429-11	CARBON	10K	5%	1/4W
R627	1-249-420-11	CARBON	1.8K	5%	1/4W
R628	1-249-410-11	CARBON	270	5%	1/4W
R629	1-247-807-31	CARBON	100	5%	1/4W
R630	1-247-807-31	CARBON	100	5%	1/4W
R631	1-249-410-11	CARBON	270	5%	1/4W
R632	1-249-411-11	CARBON	330	5%	1/4W
R633	1-249-413-11	CARBON	470	5%	1/4W
R634	1-249-414-11	CARBON	560	5%	1/4W
R635	1-249-415-11	CARBON	680	5%	1/4W
R636	1-249-417-11	CARBON	1K	5%	1/4W
R637	1-249-418-11	CARBON	1.2K	5%	1/4W
R641	1-247-893-11	CARBON	390K	5%	1/4W
R642	1-247-893-11	CARBON	390K	5%	1/4W
R643	1-249-441-11	CARBON	100K	5%	1/4W
R644	1-249-440-11	CARBON	82K	5%	1/4W
R645	1-249-437-11	CARBON	47K	5%	1/4W
R646	1-249-441-11	CARBON	100K	5%	1/4W
R647	1-249-440-11	CARBON	82K	5%	1/4W
R648	1-249-429-11	CARBON	10K	5%	1/4W
R649	1-249-420-11	CARBON	1.8K	5%	1/4W
R650	1-249-435-11	CARBON	33K	5%	1/4W
R651	1-247-895-00	CARBON	470K	5%	1/4W
R652	1-249-437-11	CARBON	47K	5%	1/4W
R653	1-249-417-11	CARBON	1K	5%	1/4W
R654	1-249-437-11	CARBON	47K	5%	1/4W
R655	1-249-417-11	CARBON	1K	5%	1/4W
R656	1-249-437-11	CARBON	47K	5%	1/4W
R658	1-249-441-11	CARBON	100K	5%	1/4W
R659	1-249-441-11	CARBON	100K	5%	1/4W
R660	1-249-441-11	CARBON	100K	5%	1/4W

PANEL FL PANEL VR

Ref. No.	Part No.	Description			Remark
R661	1-249-410-11	CARBON	270	5%	1/4W
		< SWITCH >			
S601	1-762-875-21	SWITCH, KEYBOARD (DISPLAY)			
S602	1-762-875-21	SWITCH, KEYBOARD (SPECTRUM ANALYZER)			
S603	1-762-875-21	SWITCH, KEYBOARD (TIMER SELECT)			
S604	1-762-875-21	SWITCH, KEYBOARD (SLEEP)			
S605	1-762-875-21	SWITCH, KEYBOARD (◴/CLOCK SET)			
S606	1-762-875-21	SWITCH, KEYBOARD (GAME)			
S607	1-762-875-21	SWITCH, KEYBOARD (FUNCTION)			
S608	1-762-875-21	SWITCH, KEYBOARD (I/⏻)			
S609	1-762-875-21	SWITCH, KEYBOARD (POWER SAVE/DEMO (STANDBY))			
		< VIBRATOR >			
X601	1-781-312-11	VIBRATOR, CERAMIC (12.5MHz)			

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PANEL VR BOARD
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Ref. No.	Part No.	Description			Remark
		< CAPACITOR >			
C701	1-162-294-31	CERAMIC	0.001uF	10%	50V
C702	1-162-294-31	CERAMIC	0.001uF	10%	50V
C703	1-162-294-31	CERAMIC	0.001uF	10%	50V
C704	1-104-664-11	ELECT	47uF	20%	16V
C705	1-162-306-11	CERAMIC	0.01uF	30%	16V
C711	1-162-306-11	CERAMIC	0.01uF	30%	16V
C712	1-162-306-11	CERAMIC	0.01uF	30%	16V
C713	1-164-159-21	CERAMIC	0.1uF		50V
C714	1-104-664-11	ELECT	47uF	20%	16V
C715	1-162-306-11	CERAMIC	0.01uF	30%	16V
		< CONNECTOR >			
CN701	1-568-838-11	SOCKET, CONNECTOR 21P			
CN702	1-770-010-21	CONNECTOR, BOARD TO BOARD 4P			
		< LED >			
D701	8-719-058-03	LED SEL5423E-TP15 (MOVIE)			
D702	8-719-058-03	LED SEL5423E-TP15 (ROCK)			
D703	8-719-058-03	LED SEL5423E-TP15 (REGGAE)			
D704	8-719-058-03	LED SEL5423E-TP15 (GUITAR)			
D705	8-719-058-03	LED SEL5423E-TP15 (SAMBA)			
D706	8-719-058-03	LED SEL5423E-TP15 (JAZZ)			
D707	8-719-058-03	LED SEL5423E-TP15 (TANGO)			
D708	8-719-058-03	LED SEL5423E-TP15 (DANCE)			
D709	8-719-058-03	LED SEL5423E-TP15 (GAME)			
D710	8-719-058-03	LED SEL5423E-TP15 (SALSA)			
D713	8-719-058-03	LED SEL5423E-TP15 (TUNER/BAND)			
D714	8-719-058-04	LED SEL5223S-TP15 (ENTER)			
D715	8-719-058-04	LED SEL5223S-TP15 (GUITAR DISTORTION)			
D716	8-719-058-04	LED SEL5223S-TP15 (ENTER/NEXT)			
D717	8-719-058-04	LED SEL5223S-TP15 (GROOVE)			
D718	8-719-058-04	LED SEL5223S-TP15 (SUPER WOOFER)			
D719	8-719-057-97	LED SEL5923A-TP15 (SURROUND)			
		< IC >			
IC701	8-759-567-59	IC NJU3716L			
IC702	8-759-827-68	IC NJL62H400A-1 (REMOTE CONTROL RECEIVER)			
		< COIL >			
L701	1-410-509-11	INDUCTOR	10uH		
		< RESISTOR >			
R701	1-249-411-11	CARBON	330	5%	1/4W
R702	1-249-413-11	CARBON	470	5%	1/4W
R703	1-249-414-11	CARBON	560	5%	1/4W
R704	1-249-415-11	CARBON	680	5%	1/4W
R705	1-249-417-11	CARBON	1K	5%	1/4W
R706	1-249-418-11	CARBON	1.2K	5%	1/4W
R707	1-249-420-11	CARBON	1.8K	5%	1/4W
R708	1-249-422-11	CARBON	2.7K	5%	1/4W
R709	1-247-843-11	CARBON	3.3K	5%	1/4W
R710	1-249-425-11	CARBON	4.7K	5%	1/4W
R711	1-249-427-11	CARBON	6.8K	5%	1/4W
R712	1-249-429-11	CARBON	10K	5%	1/4W
R713	1-249-431-11	CARBON	15K	5%	1/4W
R714	1-249-434-11	CARBON	27K	5%	1/4W
R715	1-249-411-11	CARBON	330	5%	1/4W
R716	1-249-413-11	CARBON	470	5%	1/4W
R717	1-249-414-11	CARBON	560	5%	1/4W
R718	1-249-415-11	CARBON	680	5%	1/4W
R719	1-249-417-11	CARBON	1K	5%	1/4W
R720	1-249-418-11	CARBON	1.2K	5%	1/4W
R721	1-249-420-11	CARBON	1.8K	5%	1/4W
R722	1-249-422-11	CARBON	2.7K	5%	1/4W
R723	1-247-843-11	CARBON	3.3K	5%	1/4W
R724	1-249-425-11	CARBON	4.7K	5%	1/4W
R725	1-249-420-11	CARBON	1.8K	5%	1/4W
R726	1-249-422-11	CARBON	2.7K	5%	1/4W
R727	1-247-843-11	CARBON	3.3K	5%	1/4W
R728	1-249-425-11	CARBON	4.7K	5%	1/4W
R729	1-249-427-11	CARBON	6.8K	5%	1/4W
R730	1-249-429-11	CARBON	10K	5%	1/4W (XG700)
R734	1-249-417-11	CARBON	1K	5%	1/4W
R735	1-249-417-11	CARBON	1K	5%	1/4W
R736	1-249-401-11	CARBON	47	5%	1/4W
R737	1-247-807-31	CARBON	100	5%	1/4W
R738	1-247-807-31	CARBON	100	5%	1/4W
R739	1-247-807-31	CARBON	100	5%	1/4W
R740	1-249-429-11	CARBON	10K	5%	1/4W
R771	1-249-403-11	CARBON	68	5%	1/4W
R772	1-249-403-11	CARBON	68	5%	1/4W
R773	1-249-403-11	CARBON	68	5%	1/4W
R774	1-249-403-11	CARBON	68	5%	1/4W
R775	1-249-403-11	CARBON	68	5%	1/4W
R776	1-249-403-11	CARBON	68	5%	1/4W
R777	1-249-403-11	CARBON	68	5%	1/4W
R778	1-249-403-11	CARBON	68	5%	1/4W
R779	1-249-403-11	CARBON	68	5%	1/4W
R780	1-249-403-11	CARBON	68	5%	1/4W
R783	1-249-403-11	CARBON	68	5%	1/4W
R784	1-249-407-11	CARBON	150	5%	1/4W
R785	1-249-407-11	CARBON	150	5%	1/4W

PANEL VR | SUB TRANS | TABLE SENSOR | TC-A

Ref. No.	Part No.	Description			Remark
R786	1-249-407-11	CARBON	150	5%	1/4W
R787	1-249-407-11	CARBON	150	5%	1/4W
R788	1-249-407-11	CARBON	150	5%	1/4W
R789	1-249-403-11	CARBON	68	5%	1/4W
R790	1-249-409-11	CARBON	220	5%	1/4W
R791	1-249-409-11	CARBON	220	5%	1/4W
R792	1-249-406-11	CARBON	120	5%	1/4W
		< SWITCH/ROTARY ENCODER >			
S701	1-762-875-21	SWITCH, KEYBOARD (TUNER MEMORY)			
S702	1-762-875-21	SWITCH, KEYBOARD (ENTER/NEXT)			
S703	1-762-875-21	SWITCH, KEYBOARD (-)			
S704	1-762-875-21	SWITCH, KEYBOARD (TUNER/BAND)			
S705	1-762-875-21	SWITCH, KEYBOARD (+)			
S706	1-762-875-21	SWITCH, KEYBOARD (STEREO/MONO)			
S707	1-762-875-21	SWITCH, KEYBOARD (TUNING MODE)			
S708	1-762-875-21	SWITCH, KEYBOARD (ENTER)			
S709	1-762-875-21	SWITCH, KEYBOARD (P.FILE)			
S710	1-762-875-21	SWITCH, KEYBOARD (FLAT)			
S712	1-762-875-21	SWITCH, KEYBOARD (SURROUND)			
S713	1-762-875-21	SWITCH, KEYBOARD (GROOVE)			
S714	1-762-875-21	SWITCH, KEYBOARD (SUPER WOOFER)			
S715	1-762-875-21	SWITCH, KEYBOARD (SUPER WOOFER MODE)			
S716	1-762-875-21	SWITCH, KEYBOARD (GUITAR)			
S717	1-762-875-21	SWITCH, KEYBOARD (JAZZ)			
S718	1-762-875-21	SWITCH, KEYBOARD (SAMBA)			
S719	1-762-875-21	SWITCH, KEYBOARD (DANCE)			
S720	1-762-875-21	SWITCH, KEYBOARD (TANGO)			
S721	1-762-875-21	SWITCH, KEYBOARD (SALSA)			
S722	1-762-875-21	SWITCH, KEYBOARD (GAME)			
S723	1-762-875-21	SWITCH, KEYBOARD (◀)			
S724	1-762-875-21	SWITCH, KEYBOARD (▲)			
S725	1-762-875-21	SWITCH, KEYBOARD (▼)			
S726	1-762-875-21	SWITCH, KEYBOARD (▶)			
S727	1-762-875-21	SWITCH, KEYBOARD (ROCK)			
S728	1-762-875-21	SWITCH, KEYBOARD (MOVIE)			
S729	1-762-875-21	SWITCH, KEYBOARD (REGGAE)			
S730	1-762-875-21	SWITCH, KEYBOARD (MIC GUITAR/KARAOKE)			
S731	1-762-875-21	SWITCH, KEYBOARD (GUITAR DISTORTION)			
S732	1-762-875-21	SWITCH, KEYBOARD (PTY) (XG700)			
S736	1-473-392-11	ENCODER, ROTARY (VOLUME)			

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Ref. No.	Part No.	Description			Remark
	1-680-175-11	SUB TRANS BOARD ****************			
		< CAPACITOR >			
⚠C901	1-113-925-11	CERAMIC	0.01uF	20%	250V
		< CONNECTOR >			
CN901	1-564-321-00	PIN, CONNECTOR 2P			
* CN902	1-564-321-21	PIN, CONNECTOR 2P (AEP, UK, MX)			
CN902	1-568-106-11	PIN, CONNECTOR 4P (E2, EA, SP, AR)			
		< DIODE >			
⚠D901	8-719-991-33	DIODE 1SS133T-77			
		< RELAY >			
⚠RY901	1-755-276-11	RELAY, POWER			
		< SWITCH >			
⚠S901	1-786-055-21	SELECTOR, VOLTAGE (VOLTAGE SELECTOR) (E2, EA, SP,AR)			
		< TRANSFORMER >			
⚠T901	1-435-827-11	TRANSFORMER, POWER (XG700)			
⚠T901	1-437-331-11	TRANSFORMER, POWER (XG80)			

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Ref. No.	Part No.	Description			Remark
*	1-659-058-13	TABLE SENSOR BOARD *******************			
		< PHOTO INTERRUPTER >			
IC202	8-749-924-18	PHOTO INTERRUPTER RPI-1391			
		< RESISTOR >			
R207	1-249-416-11	CARBON	820	5%	1/4W

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Ref. No.	Part No.	Description			Remark
	1-680-171-11	TC-A BOARD ***********			
		< LED >			
D621	8-719-058-03	LED SEL5423E-TP15 (▷)			
D622	8-719-058-03	LED SEL5423E-TP15 (◁)			
		< RESISTOR >			
R681	1-249-411-11	CARBON	330	5%	1/4W
R682	1-249-413-11	CARBON	470	5%	1/4W
R683	1-249-414-11	CARBON	560	5%	1/4W
R684	1-249-415-11	CARBON	680	5%	1/4W
R685	1-249-417-11	CARBON	1K	5%	1/4W
R686	1-249-418-11	CARBON	1.2K	5%	1/4W
R687	1-249-403-11	CARBON	68	5%	1/4W
R688	1-249-403-11	CARBON	68	5%	1/4W
		< VARIABLE RESISTOR >			
RV601	1-225-739-11	RES, VAR CARBON 50K (GUITAR LEVEL)			
RV602	1-225-739-11	RES, VAR CARBON 50K (MIC LEVEL)			
		< SWITCH >			
S621	1-762-875-21	SWITCH, KEYBOARD (▷)			
S622	1-762-875-21	SWITCH, KEYBOARD (◁)			
S623	1-762-875-21	SWITCH, KEYBOARD (■)			
S624	1-762-875-21	SWITCH, KEYBOARD (I◀◀ AMS ▶▶I ◀◀)			
S625	1-762-875-21	SWITCH, KEYBOARD (I◀◀ AMS ▶▶I ▶▶)			
S626	1-762-875-21	SWITCH, KEYBOARD (DOLBY NR)			
S627	1-762-875-21	SWITCH, KEYBOARD (DIRECTION)			

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The components identified by mark ⚠ or dotted line with mark ⚠ are critical for safety.
Replace only with part number specified.

TC-B **TRANS**

Ref. No.	Part No.	Description	Remark
	1-680-172-11	TC-B BOARD	
		***********	
		< LED >	
D611	8-719-058-03	LED SEL5423E-TP15 (◁)	
D612	8-719-058-03	LED SEL5423E-TP15 (▷)	
D613	8-719-057-97	LED SEL5923A-TP15 (▮▮)	
D614	8-719-058-04	LED SEL5223S-TP15 (● REC)	
		< RESISTOR >	
R662	1-249-411-11	CARBON 330 5% 1/4W	
R663	1-249-413-11	CARBON 470 5% 1/4W	
R664	1-249-414-11	CARBON 560 5% 1/4W	
R665	1-249-427-11	CARBON 6.8K 5% 1/4W	
R666	1-249-429-11	CARBON 10K 5% 1/4W	
R667	1-249-431-11	CARBON 15K 5% 1/4W	
R668	1-249-434-11	CARBON 27K 5% 1/4W	
R669	1-249-438-11	CARBON 56K 5% 1/4W	
R670	1-249-403-11	CARBON 68 5% 1/4W	
R671	1-249-403-11	CARBON 68 5% 1/4W	
R672	1-249-403-11	CARBON 68 5% 1/4W	
R673	1-249-407-11	CARBON 150 5% 1/4W	
		< SWITCH >	
S611	1-762-875-21	SWITCH, KEYBOARD (▮▮)	
S612	1-762-875-21	SWITCH, KEYBOARD (● REC)	
S613	1-762-875-21	SWITCH, KEYBOARD (H SPEED DUB)	
S614	1-762-875-21	SWITCH, KEYBOARD (CD SYNC)	
S615	1-762-875-21	SWITCH, KEYBOARD (◁)	
S616	1-762-875-21	SWITCH, KEYBOARD (▷)	
S617	1-762-875-21	SWITCH, KEYBOARD (■)	
S618	1-762-875-21	SWITCH, KEYBOARD (⏮ AMS ⏭ ◀◀)	
S619	1-762-875-21	SWITCH, KEYBOARD (⏮ AMS ⏭ ▶▶)	

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Ref. No.	Part No.	Description	Remark
	1-680-174-11	TRANS BOARD	
		*************	
	1-533-217-31	HOLDER, FUSE	
	7-685-646-79	SCREW +BVTP 3X8 TYPE2 N-S	
		< CAPACITOR >	
C834	1-130-777-00	MYLAR 0.1uF 10% 100V	
C893	1-130-777-00	MYLAR 0.1uF 10% 100V	
C961	1-162-306-11	CERAMIC 0.01uF 30% 16V	
C963	1-162-306-11	CERAMIC 0.01uF 30% 16V	
		< CONNECTOR >	
* CN951	1-564-214-11	PIN, CONNECTOR (B3PS-VH) 3P	
* CN952	1-564-526-11	PLUG, CONNECTOR 11P	
		< DIODE >	
D832	8-719-510-68	DIODE D5SBA204101	
		< FUSE >	
⚠F951	1-533-949-31	FUSE, CYLINDRICAL (TIME LUG) (T8AL/250V) (E2, EA, SP, AR)	
⚠F961	1-533-949-31	FUSE, CYLINDRICAL (TIME LUG) (T8AL/250V)	
⚠F962	1-533-949-31	FUSE, CYLINDRICAL (TIME LUG) (T8AL/250V)	
⚠F963	1-532-506-31	FUSE (T6.3AL/250V)	
⚠F964	1-532-506-31	FUSE (T6.3AL/250V)	
		< RESISTOR >	
⚠R951	1-219-121-11	FUSIBLE 0.22 5% 1/4W	F
⚠R952	1-219-121-11	FUSIBLE 0.22 5% 1/4W	F
⚠R953	1-219-119-81	FUSIBLE 0.1 5% 1/4W	F

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Ref. No.	Part No.	Description	Remark
		MISCELLANEOUS	
		**************	
4	1-769-977-11	WIRE (FLAT TYPE) (13 CORE) (XG80)	
4	1-773-009-11	WIRE (FLAT TYPE) (15 CORE) (XG700)	
5	1-693-484-11	TUNER (FM/AM) (E2)	
5	1-693-488-11	TUNER (FM/AM) (EA, AR, SP, MX)	
5	1-693-490-11	TUNER (FM/AM) (AEP, UK)	
6	1-535-706-21	PLUG, JUMPER (XG80: MX/XG700)	
72	1-773-056-11	WIRE (FLAT TYPE) (17 CORE)	
73	1-773-032-11	WIRE (FLAT TYPE) (15 CORE)	
109	1-751-688-11	WIRE (FLAT TYPE) (13 CORE)	
112	1-773-150-11	WIRE (FLAT TYPE) (21 CORE)	
151	1-790-287-11	WIRE (FLAT TYPE) (19 CORE)	
⚠153	1-575-653-11	CORD, POWER (MX)	
⚠153	1-777-071-51	CORD, POWER (AEP, UK)	
⚠153	1-777-071-81	CORD, POWER (EA, SP)	
⚠153	1-783-941-12	CORD, POWER (AR)	
⚠153	1-791-901-11	CORD, POWER (E2)	
465	1-454-887-21	SOLENOID, PLUNGER	
507	1-452-925-21	MAGNET ASSY	
⚠601	8-820-020-02	OPTICAL PICK-UP KSS-213D/Q-RP	
602	1-782-817-11	WIRE (FLAT TYPE) (16 CORE)	
HP101	A-2004-778-A	BASE (A) ASSY, HEAD	
HRPE101	A-2004-779-A	BASE (B) ASSY, HEAD	
M1	X-3378-246-1	MOTOR ASSY (CAPSTAN) (TAPE)	
M101	X-4917-523-3	MOTOR ASSY (SPINDLE) (CD)	
M102	X-4917-504-1	MOTOR ASSY (SLED) (CD)	
M201	A-4660-977-A	MOTOR ASSY (TABLE) (CD)	
M901	1-763-072-11	FAN, D.C.	
⚠T951	1-435-246-11	TRANSFORMER, POWER (XG80)	
⚠T951	1-435-799-11	TRANSFORMER, POWER (XG700)	

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Ref. No.	Part No.	Description	Remark
		**************	
		HARDWARE LIST	
		**************	
#1	7-685-871-01	SCREW +BVTT 3X6 (S)	
#2	7-685-872-09	SCREW +BVTT 3X8 (S)	
#3	7-685-646-79	SCREW +BVTP 3X8 TYPE2 N-S	
#4	7-685-650-79	SCREW +BVTP 3X16 TYPE2 IT-3	
#5	7-685-881-09	SCREW +BVTT 4X8 (S)	
#11	7-628-254-05	SCREW +PS 2.6X5	
#12	7-685-781-09	SCREW +PTT 2X4 (S)	
#13	7-623-921-01	RING, RETAINING, CAPSTAN	

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The components identified by mark ⚠ or dotted line with mark ⚠ are critical for safety. Replace only with part number specified.

Ref. No.	Part No.	Description	Remark
		ACCESSORIES & PACKING MATERIALS	
		*******************************	
⚠	1-569-008-21	ADAPTOR, CONVERSION (EA, SP)	
⚠	1-770-019-11	ADAPTOR, CONVERSION PLUG 3P (UK)	

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Replace only with part number specified.

REVISION HISTORY

Clicking the version allows you to jump to the revised page.
Also, clicking the version at the upper right on the revised page allows you to jump to the next revised page.

Ver.	Date	Description of Revision
1.0	2001.03	New